



Hamilton County Department of Education

Preliminary Look at a 10-Year Facilities Master Plan

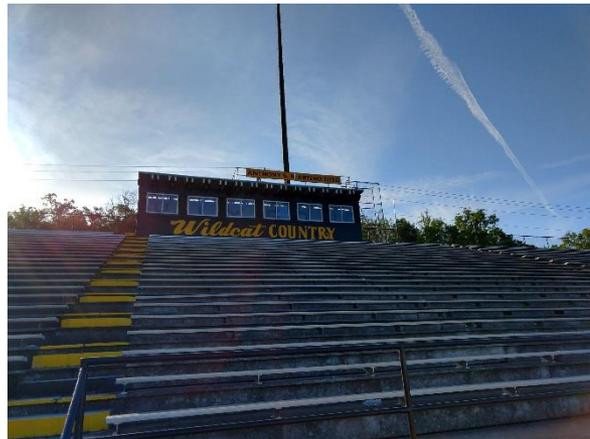
July 23, 2019

Presentation to joint meeting of Hamilton County Commission
and Hamilton County Board of Education



Agenda

- Summary of Preliminary 10-Year Facilities Master Plan
- Facilities Master Plan Components
- Preliminary 10-Year Facilities Master Plan
- Next Steps



Summary - Current

	Current	
Estimated Total Cost (2019\$, no phasing)	\$1.36 Billion	
Number of Schools	74	
Average School Size (Capacity)	695	
	2018-19	2028-29
Elementary Grade Band Utilization	97%	103%
Middle School Grade Band Utilization	74%	80%
Middle/High School Grade Band Utilization	78%	80%
High School Grade Band Utilization	82%	86%

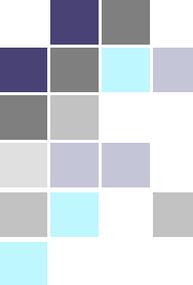
Does not include costs associated with adding capacity or account for cost savings associated with school closure.

Some schools are very small

Under district-preferred size of 1,000

Elementary utilization is now and is projected to be outside target 80-95% range

Middle and middle/high utilization is forecasted to meet target 80-95% range, but does not maximize available capacity



Summary - Facilities Master Plan Objectives

- **Reduce** the overall cost to address deficiencies
- Identify opportunities to gain efficiencies by **reducing** the number of schools and **increasing** the size of remaining schools
- **Optimize** available school capacity to efficiently accommodate forecasted 7.1% growth in enrollment and anticipated shifts in population

Summary – Preliminary Facilities Master Plan

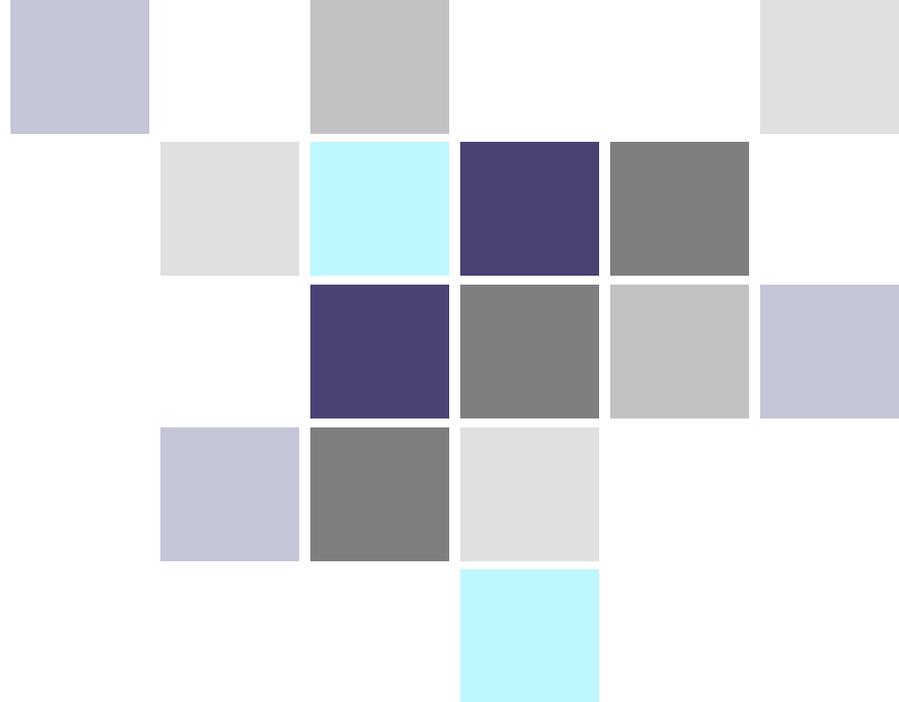
	Preliminary Facilities Master Plan Impacts		
Renovated Schools	11 – Targeting schools with assessment scores between 60-80		
Renovated Schools Receiving Additions	10 – Targeting schools with assessment scores between 60-80		
Replaced (Tear Down and Rebuild)	3 – Targeting schools with assessment scores under 60		
New Buildings	3 – Provide capacity for enrollment growth and relocated programs		
Repurposed Schools	9 – Optimize available capacity and program needs		
Relocated Programs	7 – Optimize available capacity and program needs		
Closed Schools	15 – Poor condition or location, small size, opportunities for consolidation		
Efficiencies Gained =>	Current		Preliminary Master Plan
Estimated Total Cost (2019\$, no phasing)	\$1.36 Billion		Reduced → \$855 Million**
Number of Schools	74		Reduced → 63
Average School Size (Capacity)	695		Increased → 856
	2018-19	2028-29	2028-29
Elementary School Grade Band Utilization	97%	103%	87%
Middle School Grade Band Utilization	74%	80%	84%
Middle/High School Grade Band Utilization	78%	80%	85%
High School Grade Band Utilization	82%	86%	85%

**Does not include revenue generation from sale of real estate or reduced operational expenses.

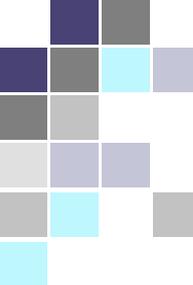
Master Plan Components

- Demographics and Enrollment
- Capacity and Utilization
- Facility Assessments
- Facility Master Plan
- Master Plan Cost Estimates and Project Phasing
- Appendices
 - Enrollment Forecasting Methodology
 - Capacity Calculation Methodology
 - Facility Assessment Methodology
 - Educational Suitability and Technology Readiness Guidelines
 - Facility Assessment Reports
 - Cost Estimate Assumptions





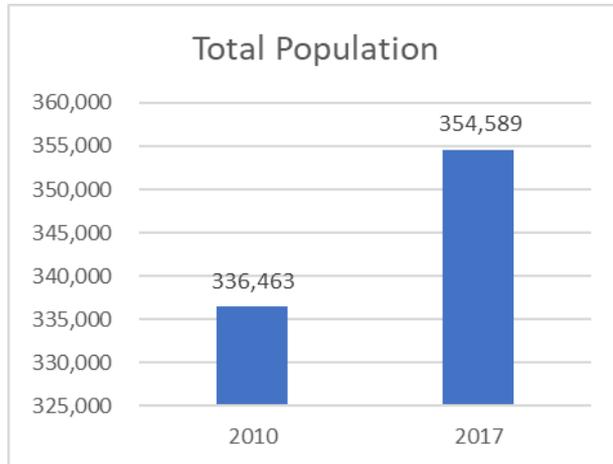
Demographics and Enrollment



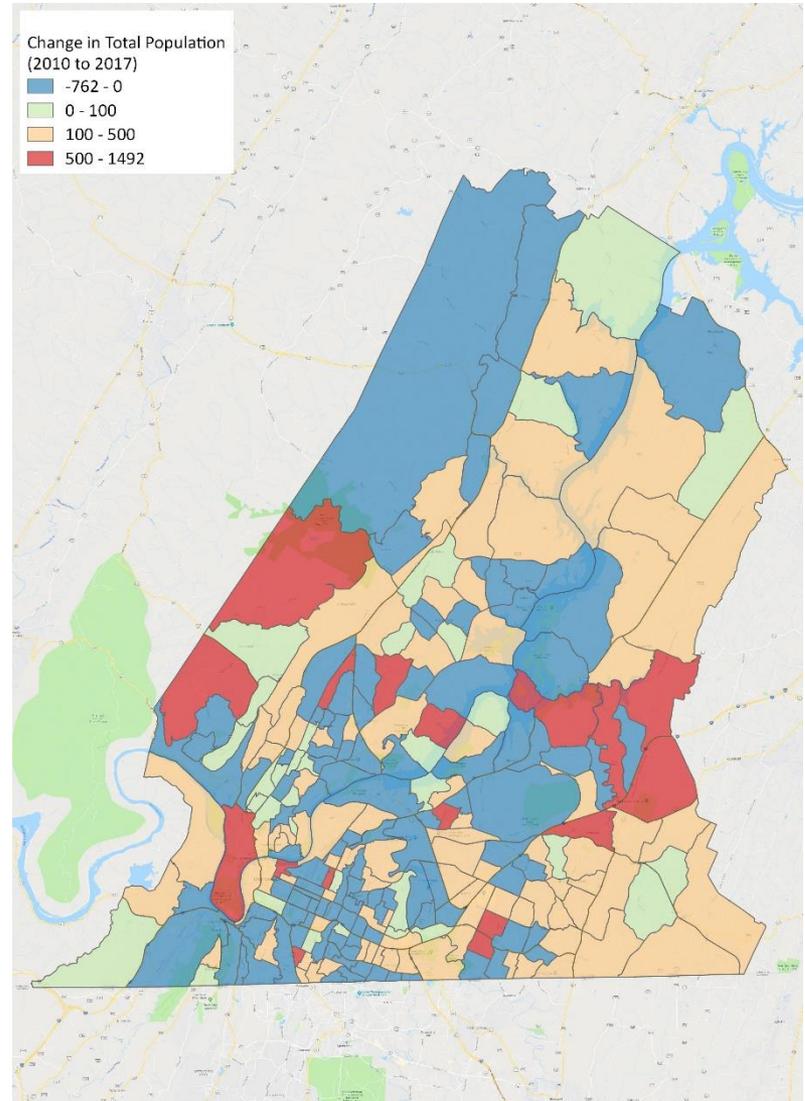
Key Demographic and Enrollment Observations

- Higher levels of population growth in southeast
- Population growth in north will be slow until infrastructure (water, sewer) is put in place
- Definite difference in population trends between central part of district and outer areas
- Current and future student population is growing, but only minimally
- Female child-bearing population has decreased
- Growth in east may bring more students to district
- Market share may be driving some enrollment growth
- Enrollment will continue to increase district-wide

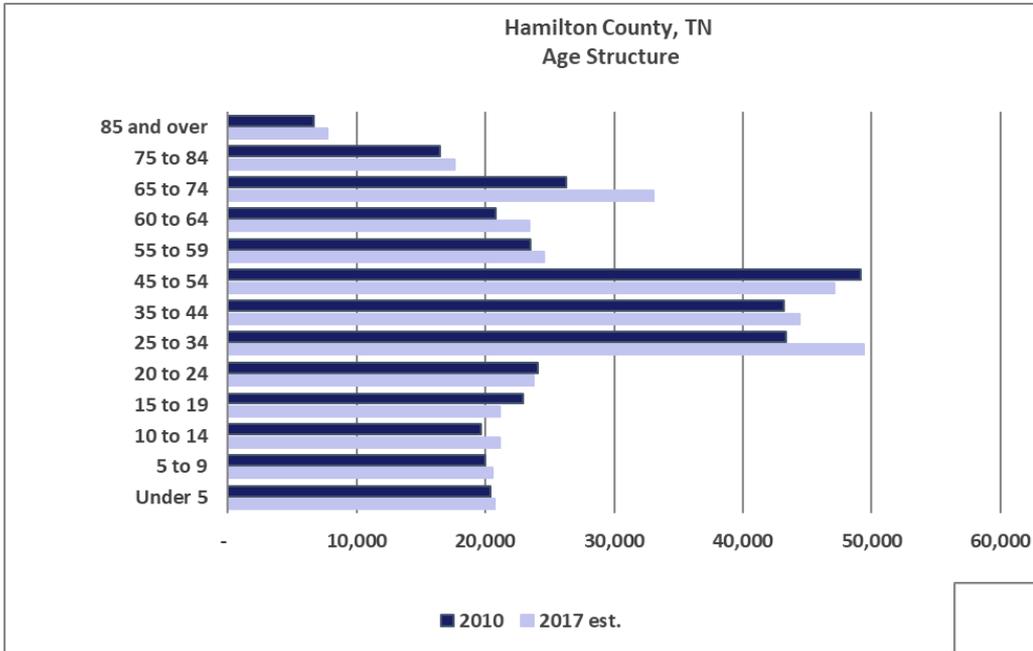
Total Population



Eastern areas of the county have experienced more growth than western areas

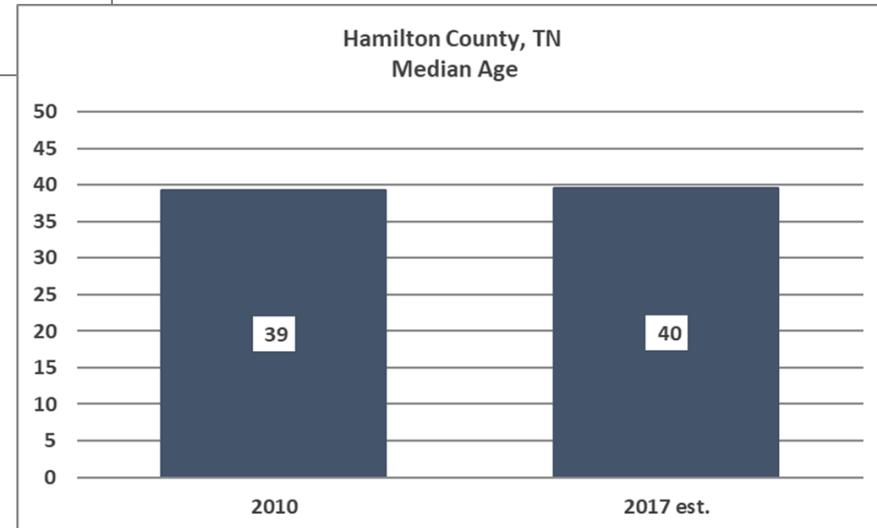


Population Age Structure

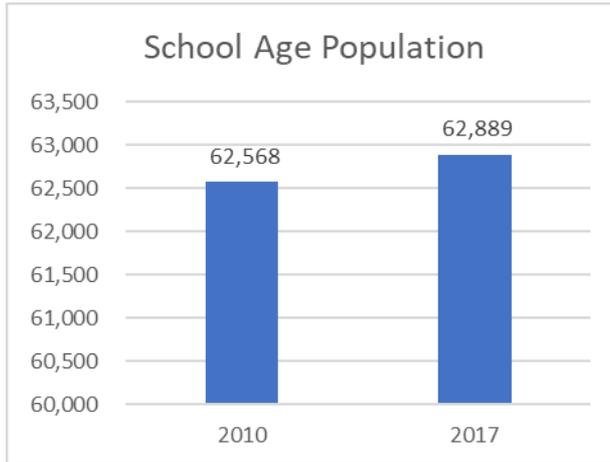


The older age groups are growing. The 25-44 age group is also growing.

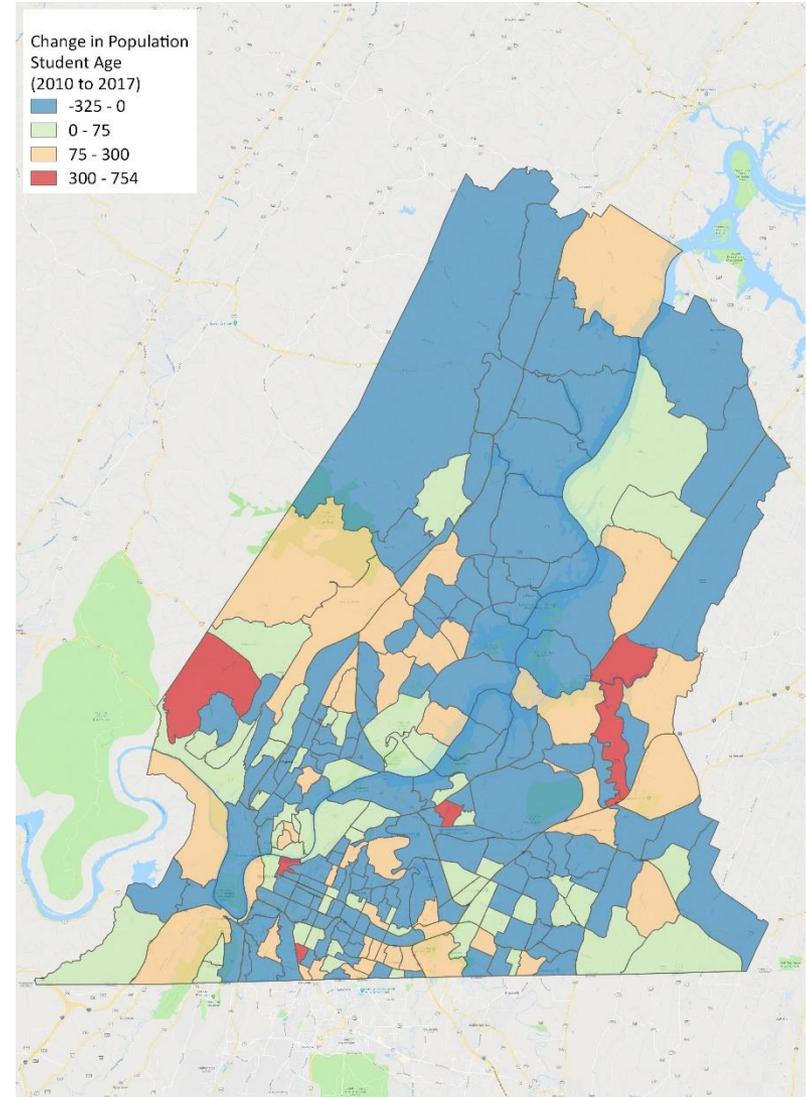
The overall population is getting older.



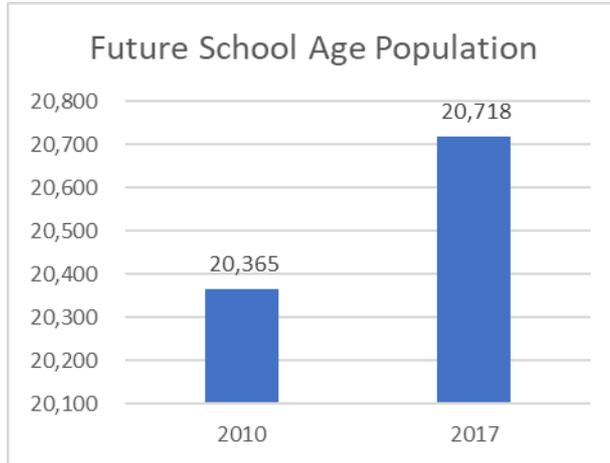
Student Age Population



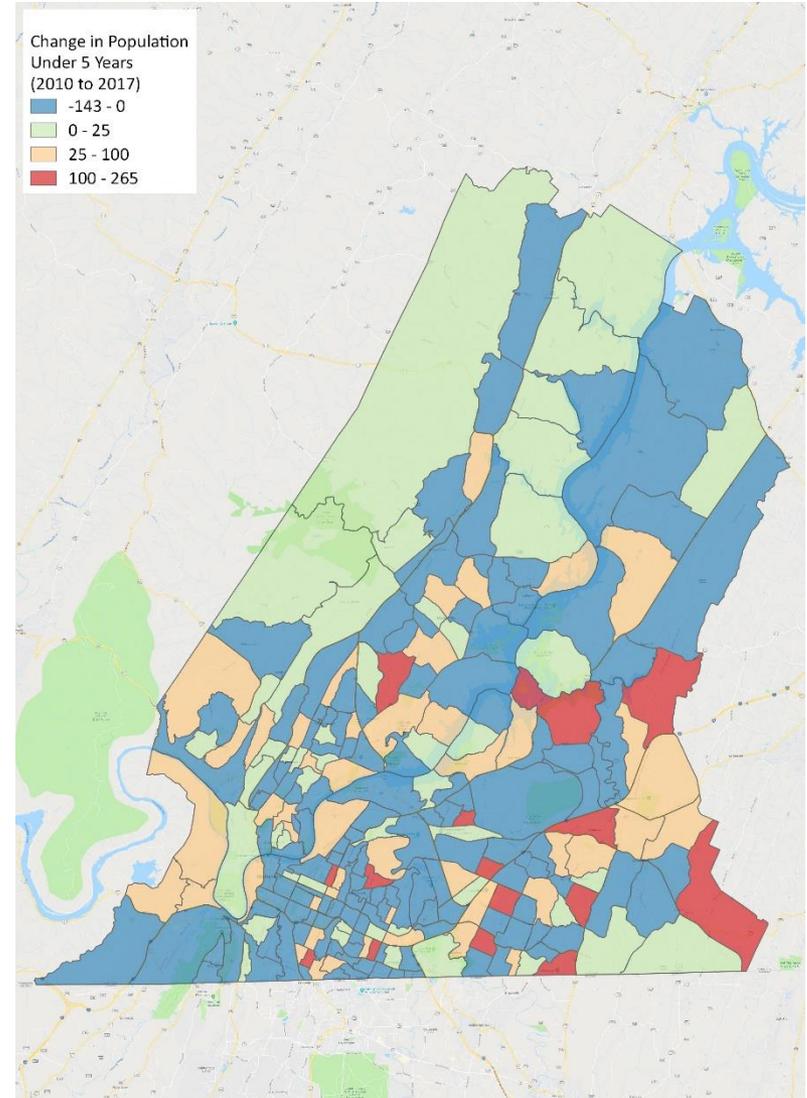
The student age population grew by only 321 students. Increases and decreases in the student population age group were spread throughout the county.



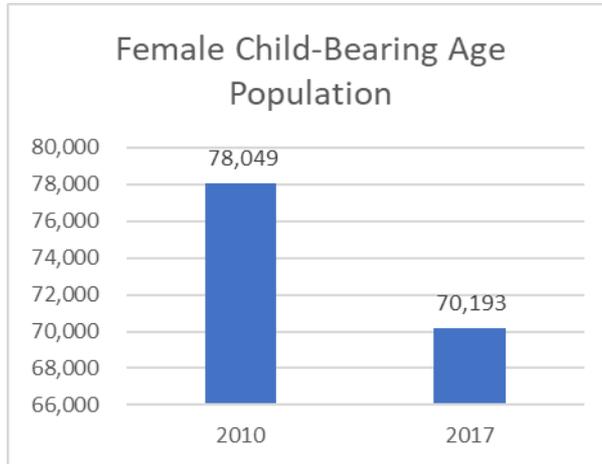
Future Student Population



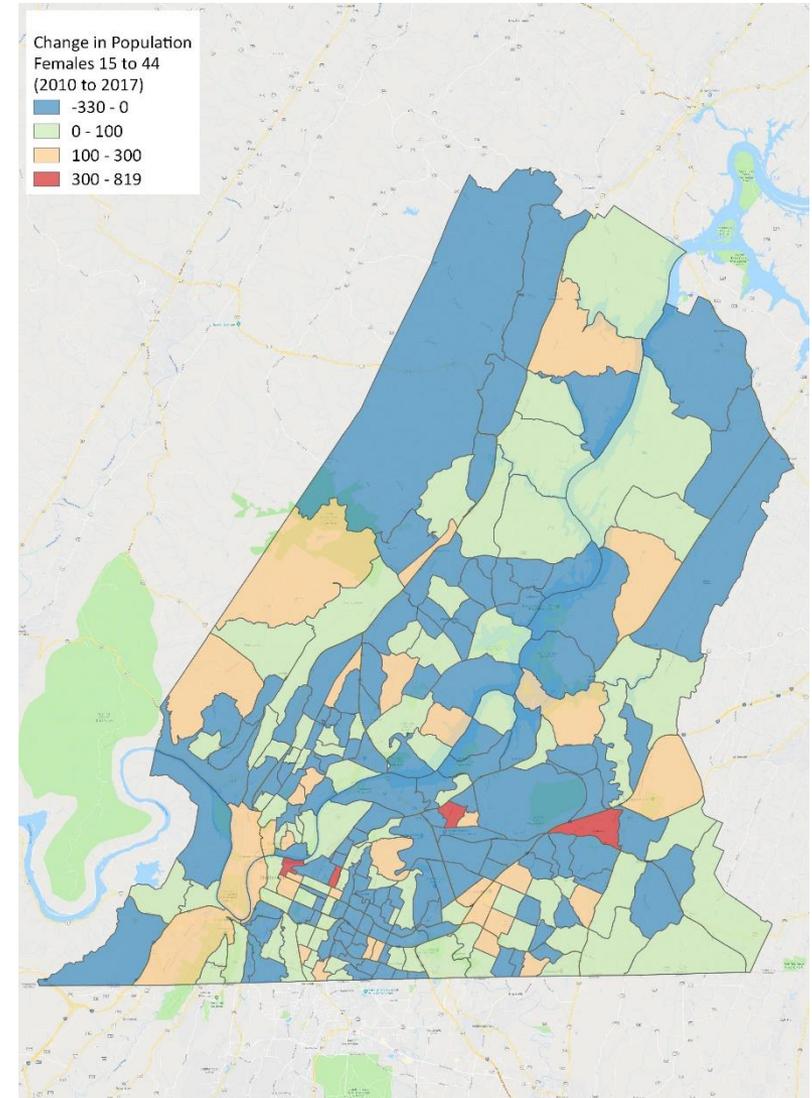
Areas that saw increases in the future student population group are primarily located in the eastern portion of the county



Female Child-Bearing Age Population



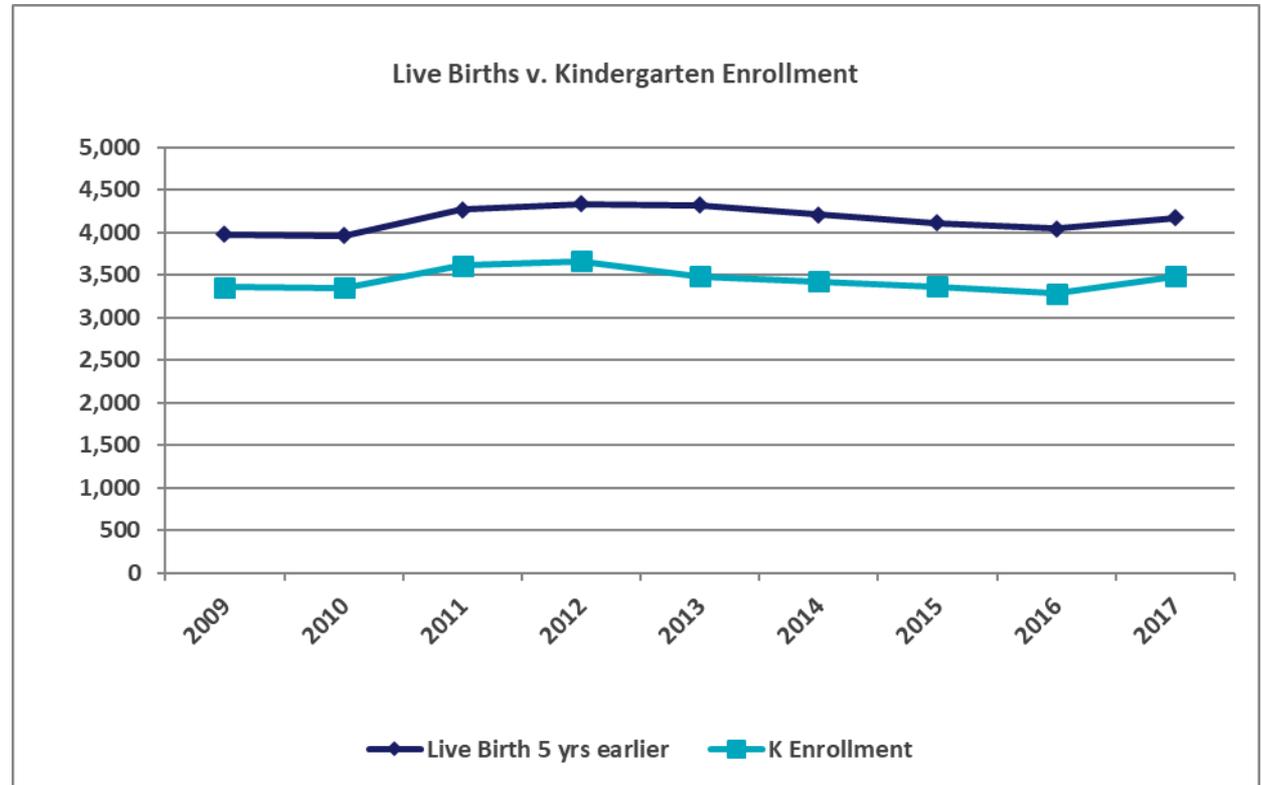
Declines in the female child-bearing age population were seen across the county.



Live Births and Kindergarten Enrollment

Kindergarten Live Birth
Capture Rate – 83%

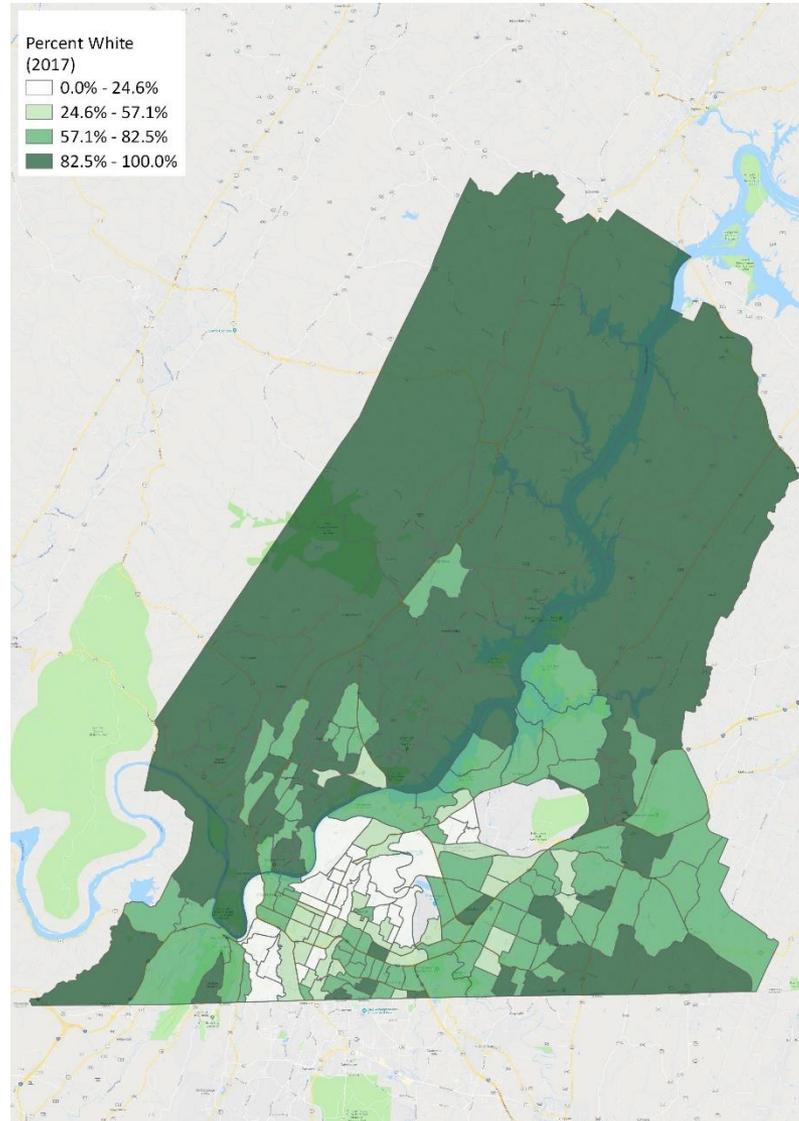
Kindergarten Correlation
Coefficient – 0.833



There is a strong correlation between live births and kindergarten enrollment in Hamilton County.

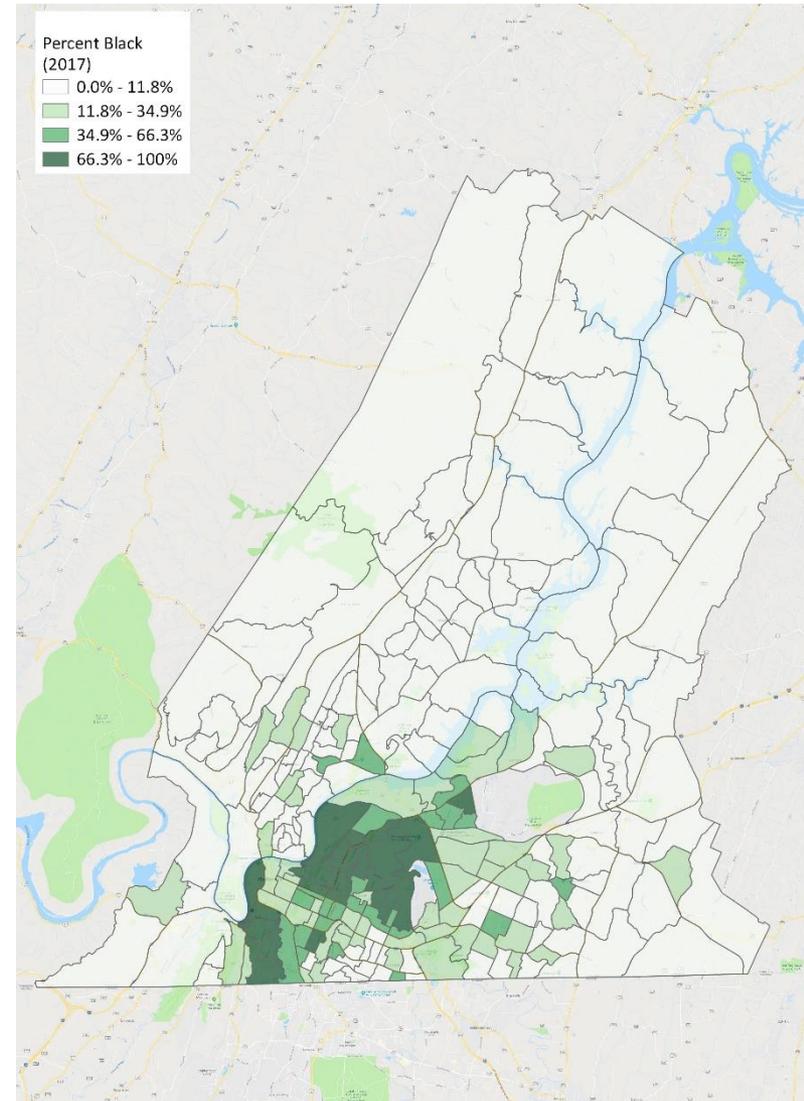
White Population

The percentage of white population is high in the outskirts of the county and lowest in the south-central block groups.



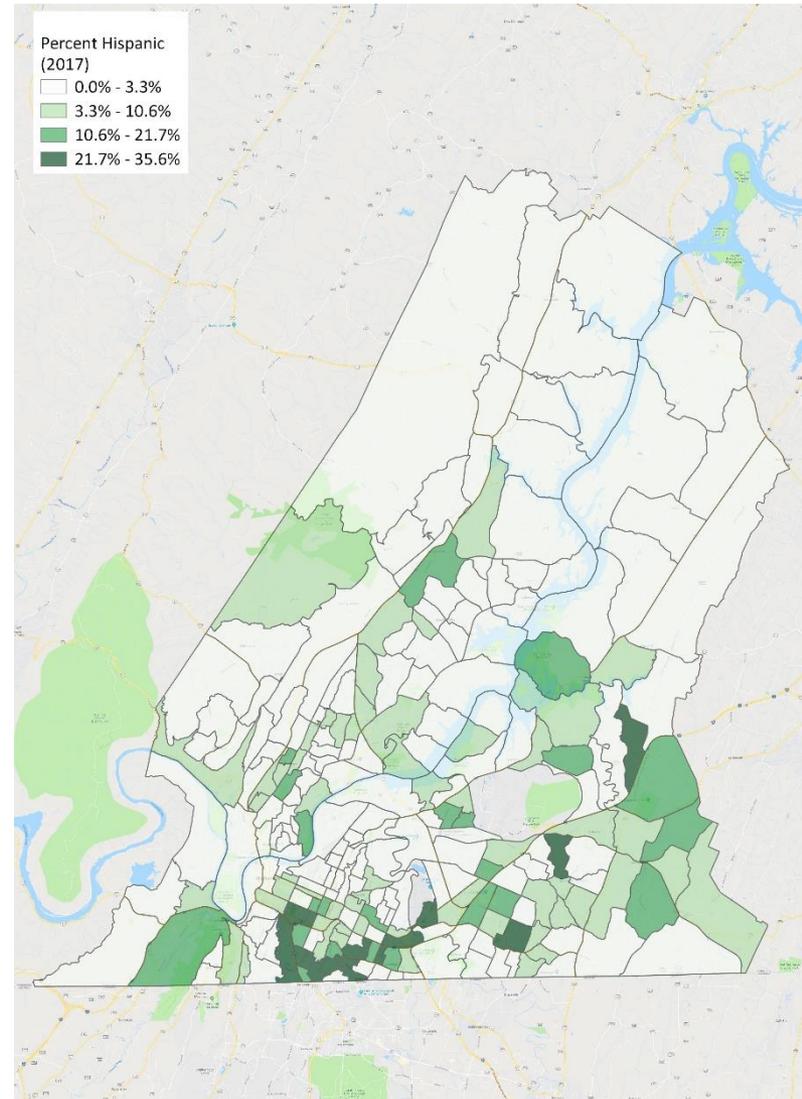
Black Population

The black population is highly concentrated in the central portion of the county.



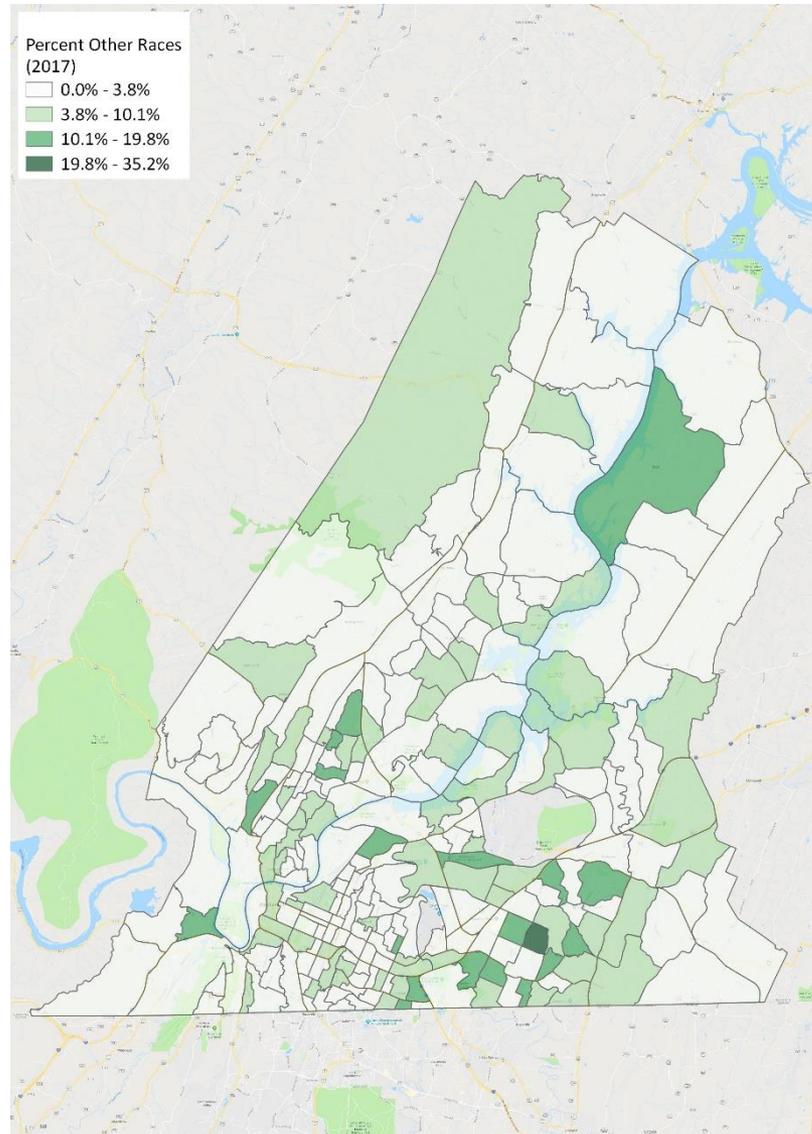
Hispanic Population

Southern areas of the county have higher percentages of Hispanic population.



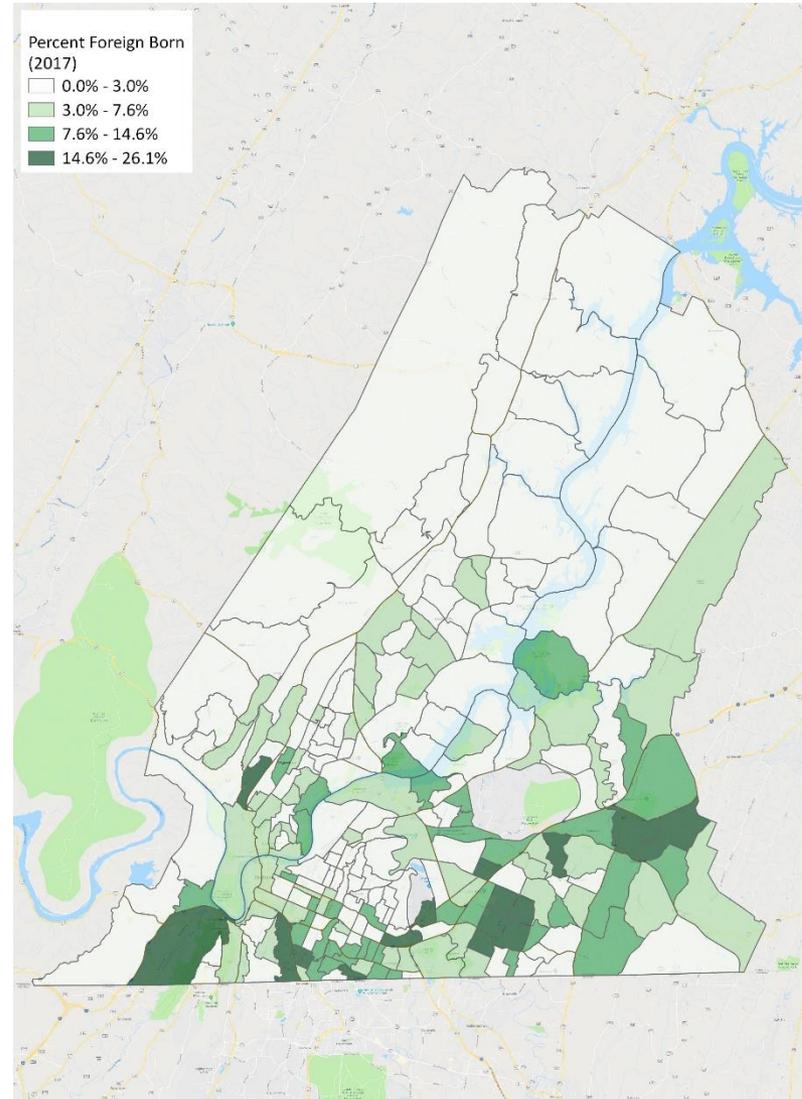
Other Races Population

Population of Other Races is higher in southeastern areas of the county.



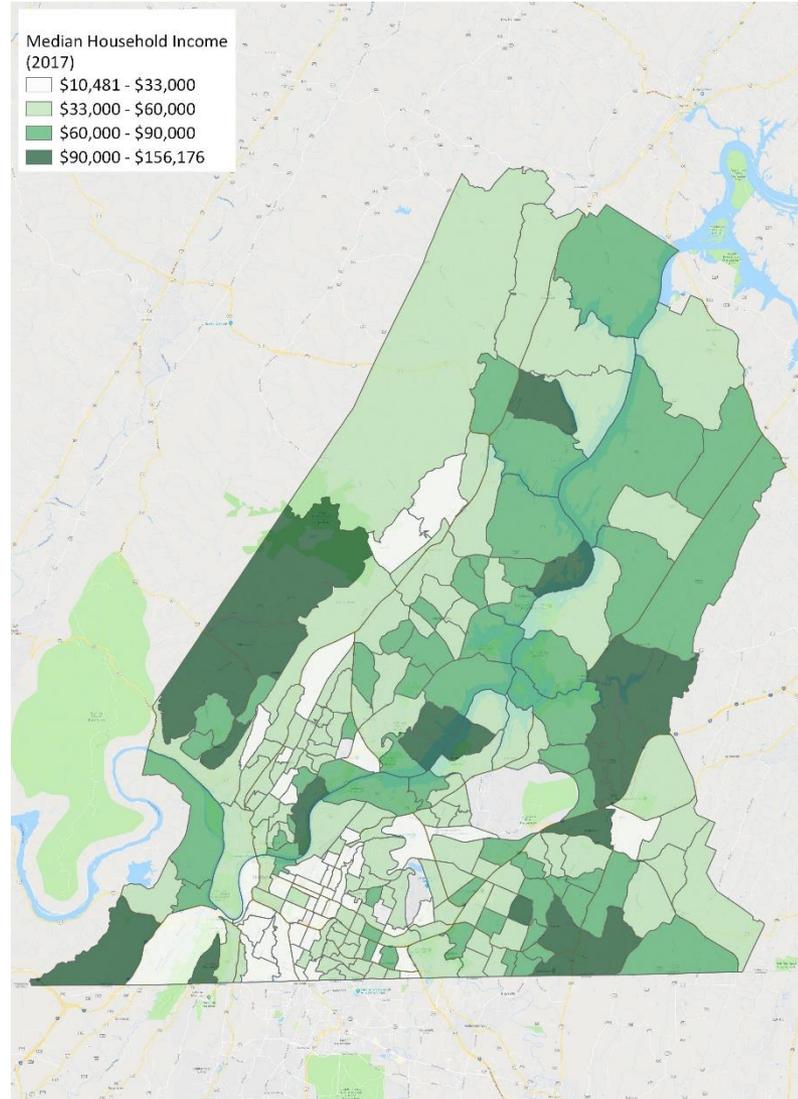
Foreign-Born Population

Southern areas of the county have higher percentages of foreign-born persons.



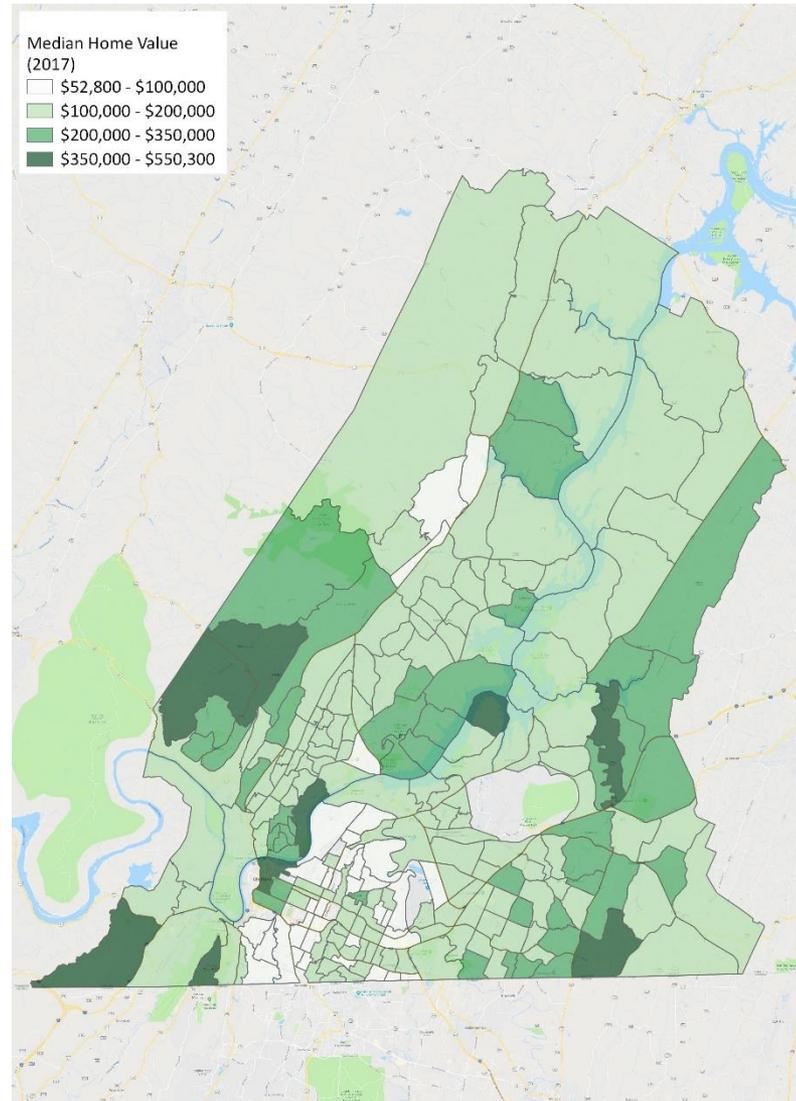
Median Household Income

Median household incomes are highest along the outskirts of the county.



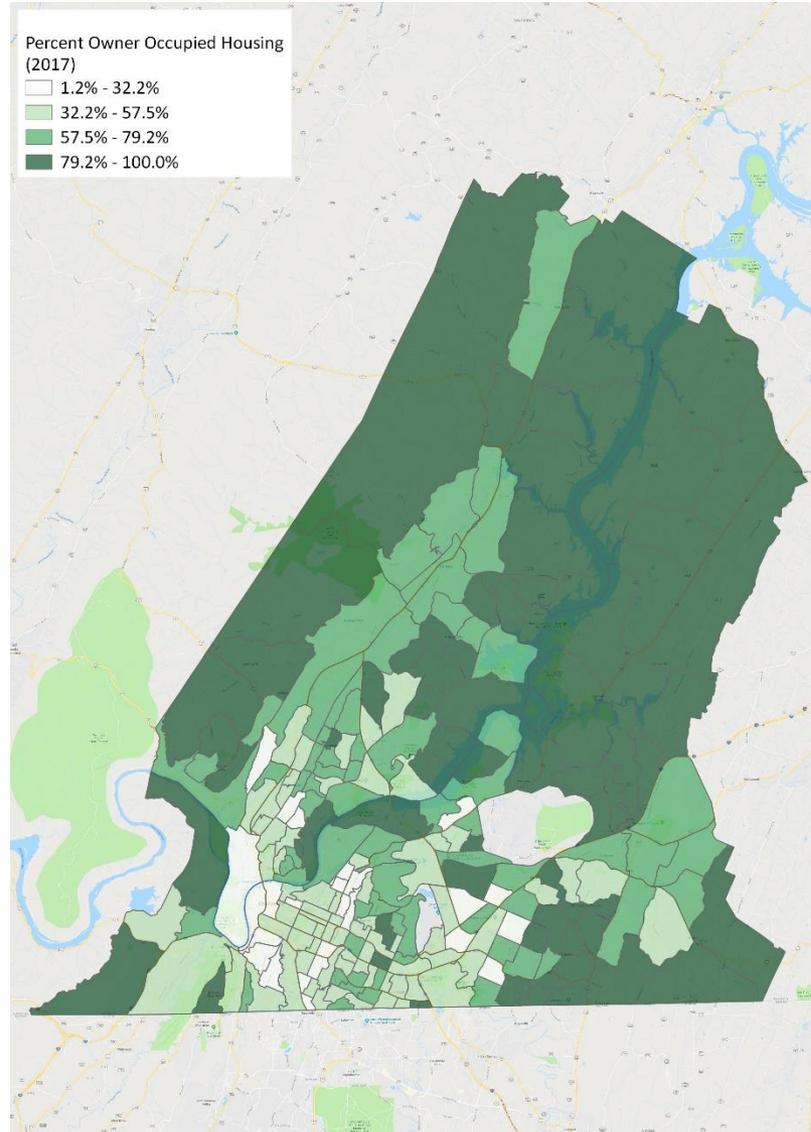
Median Home Value

Similar to median household incomes, median home values are also highest along the outskirts of the county.



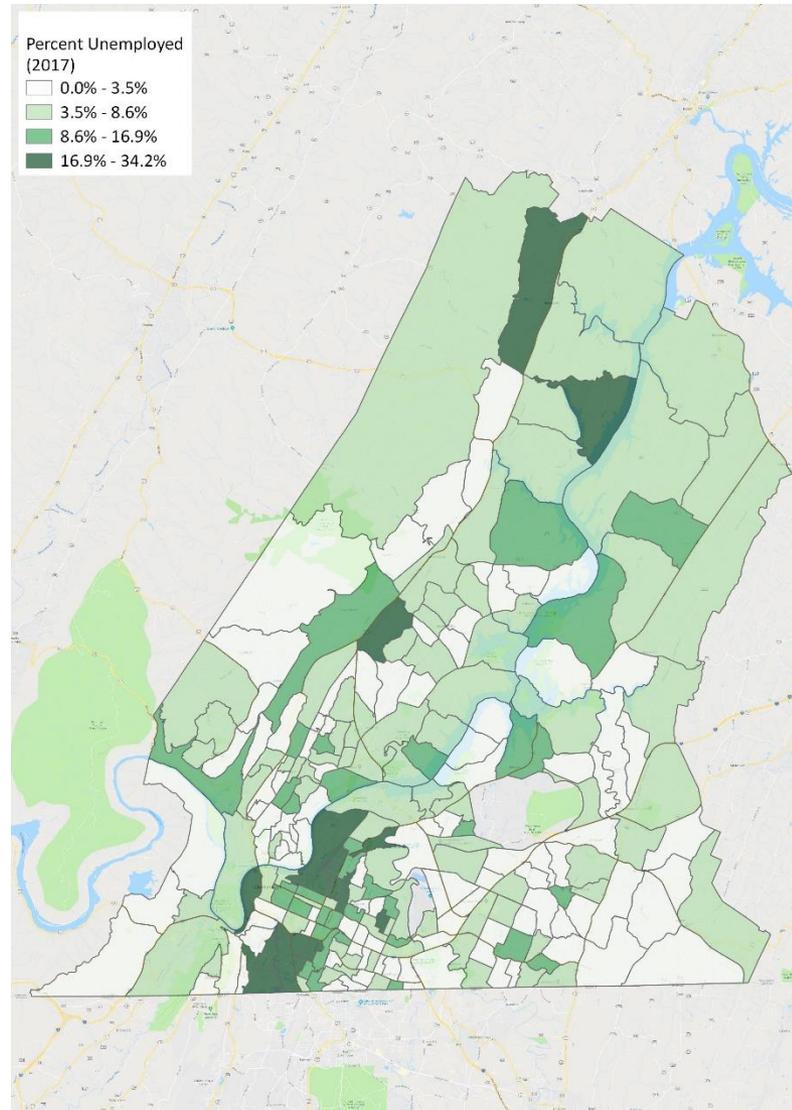
Owner-Occupied Housing

Owner occupied housing is highest along the outer block groups of the county with lower percentages of owner occupied housing found in the central area.



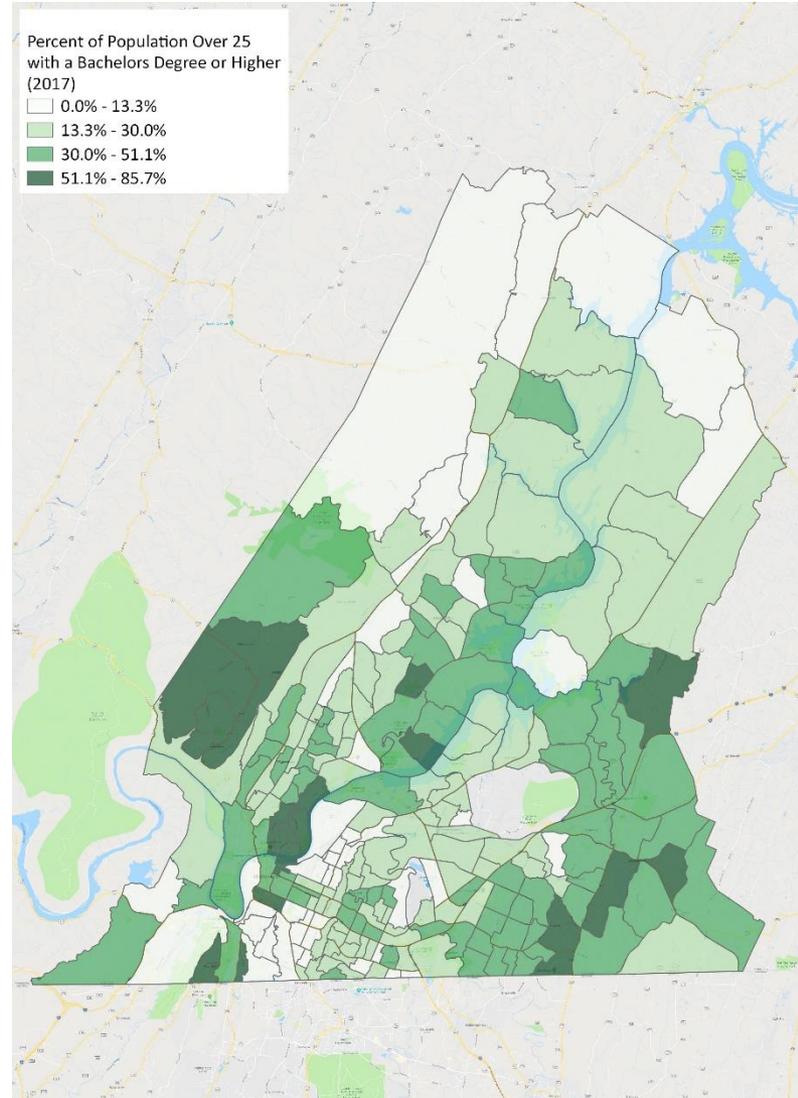
Unemployment

Unemployment rates are highest in the south central block groups of the county.



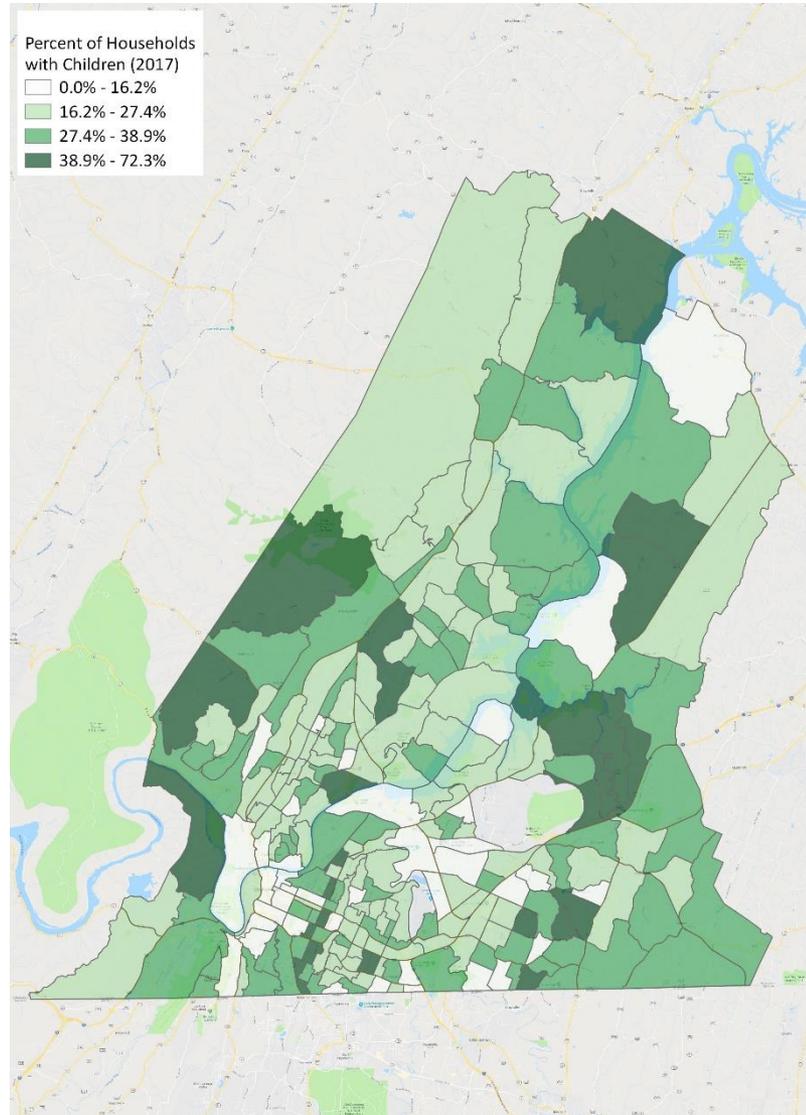
Bachelors Degree or Higher

The areas with higher percentages of the population over 25 with a Bachelors degree or professional degree can be found along the outskirts of the county.



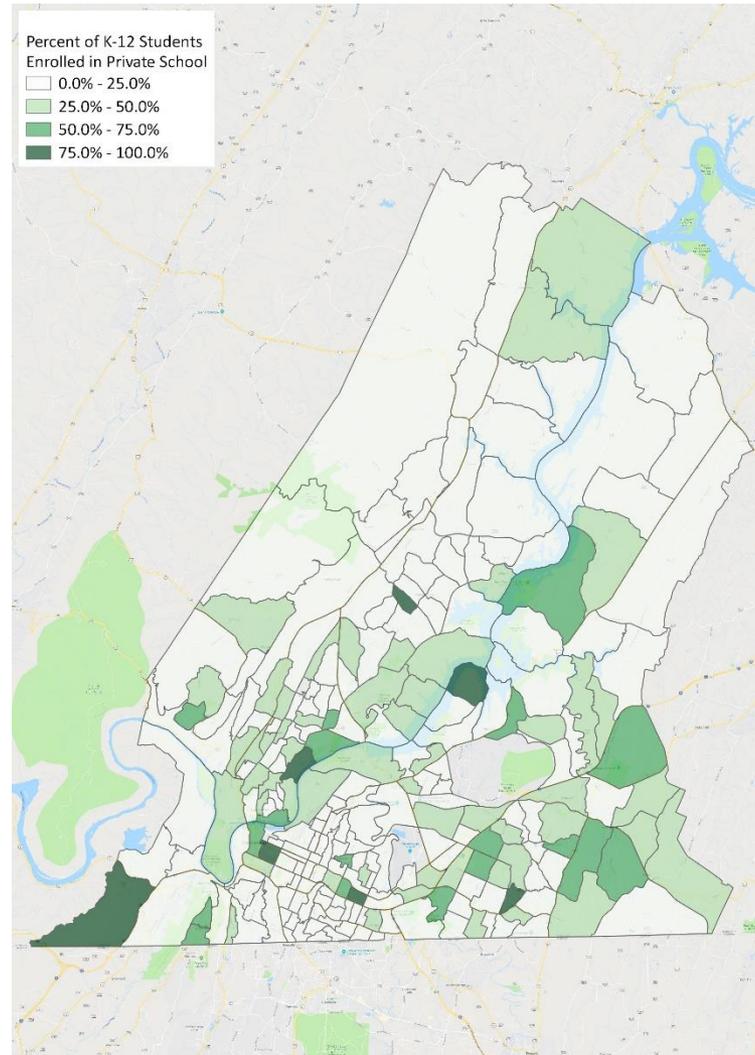
Households with Children

Block groups along the outskirts of the county have high percentages of households with children.



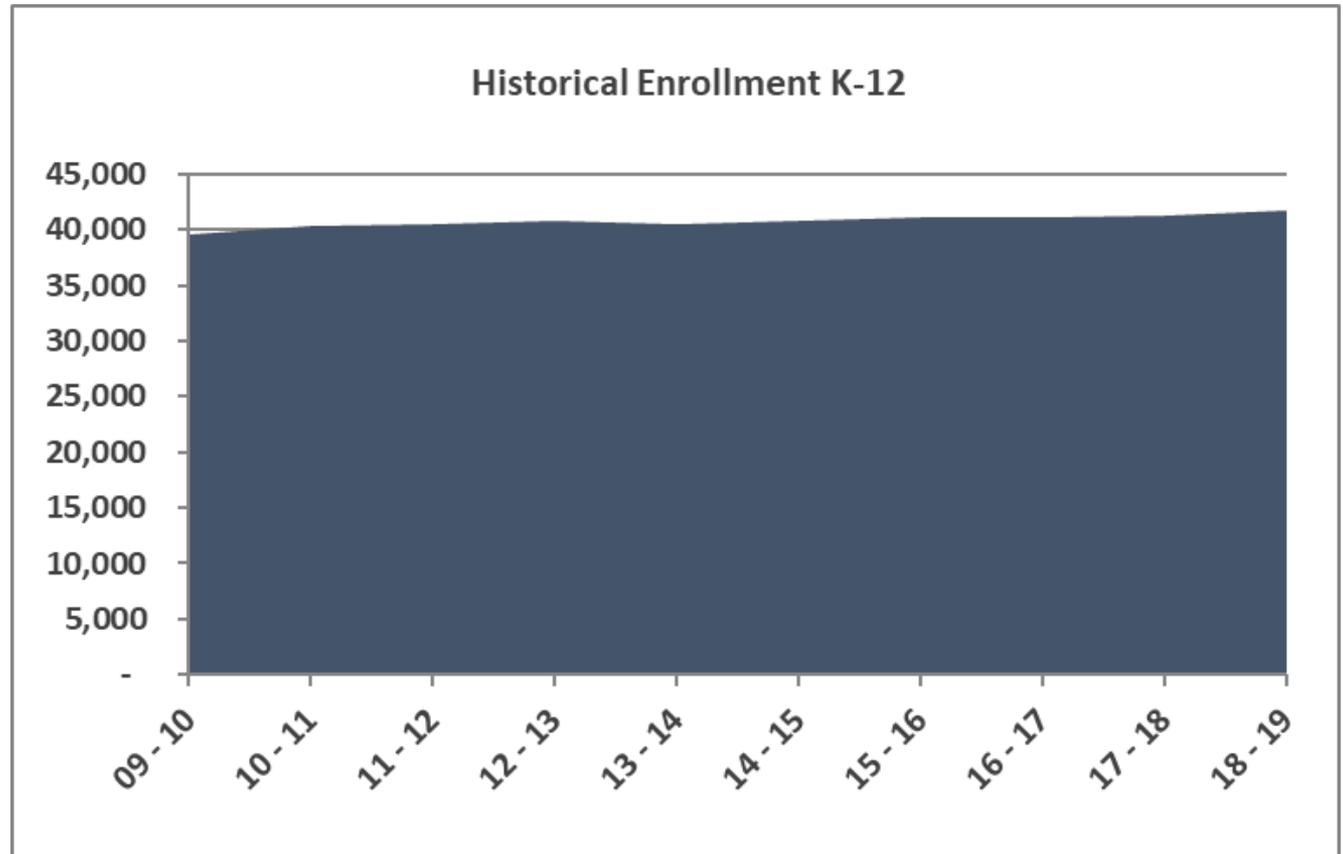
Private School Enrollment

Private school enrollment of K-12 students is generally low throughout the county with higher percentages found in the southeastern and central portion of the county.



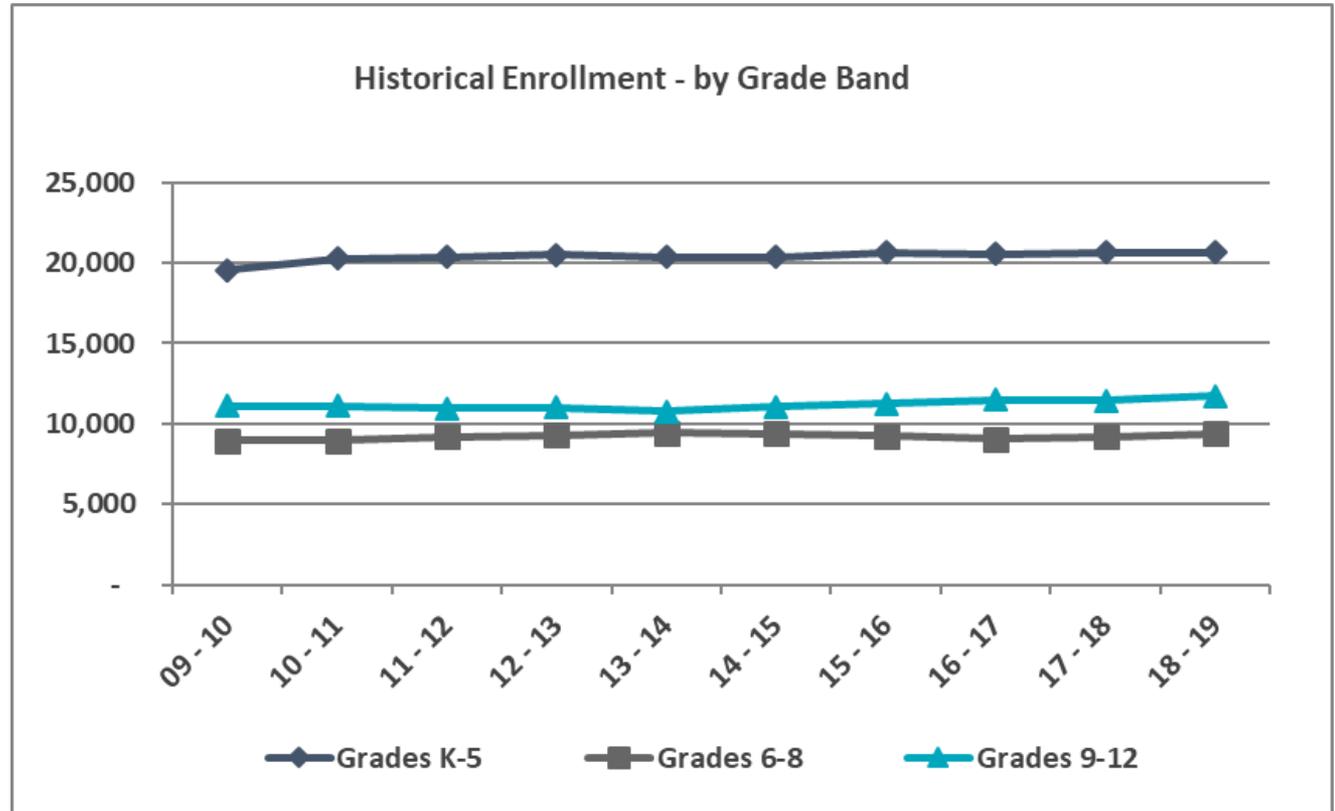
Historical Enrollment

Increased
5.45% over last
10 years.



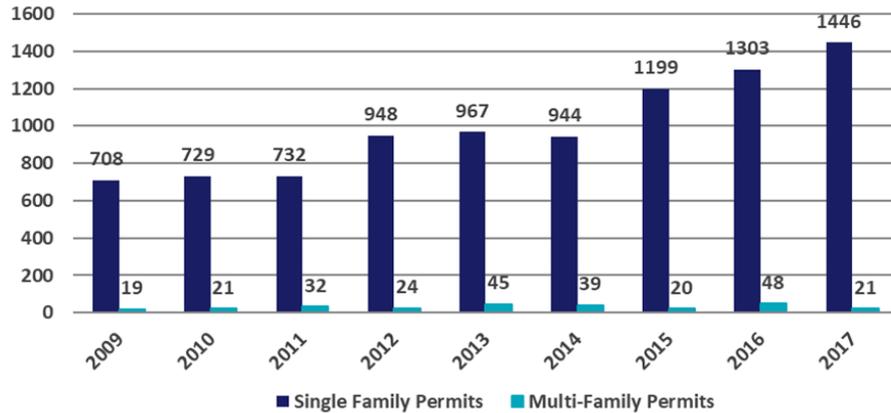
Historical Enrollment

K-5 increased 5.63%
6-8 increased 4.92%
9-12 increased 5.58%

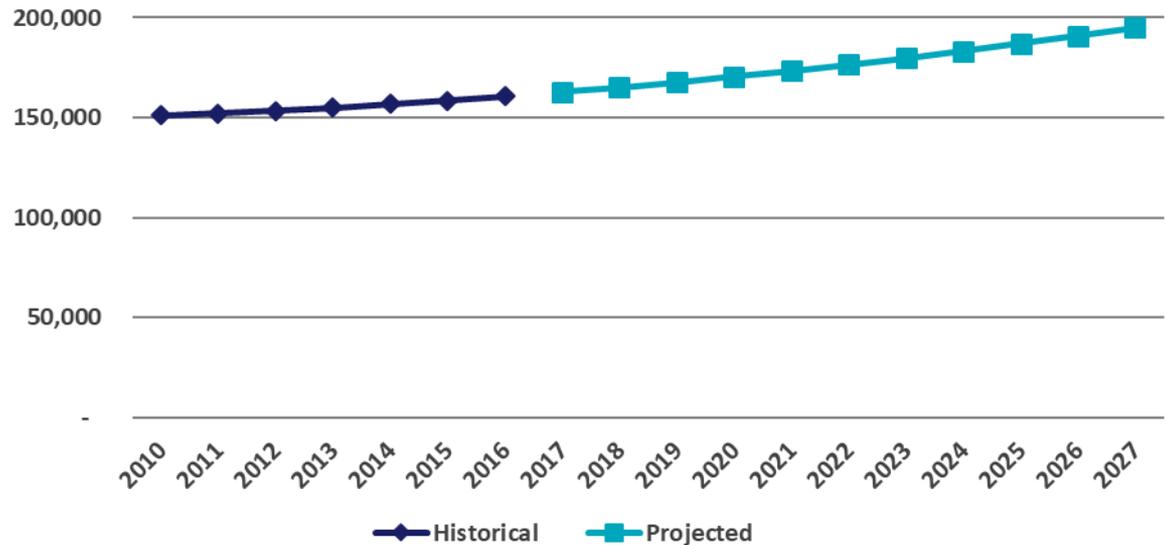


Housing

Hamilton County
Historical Residential Housing Permits by Type



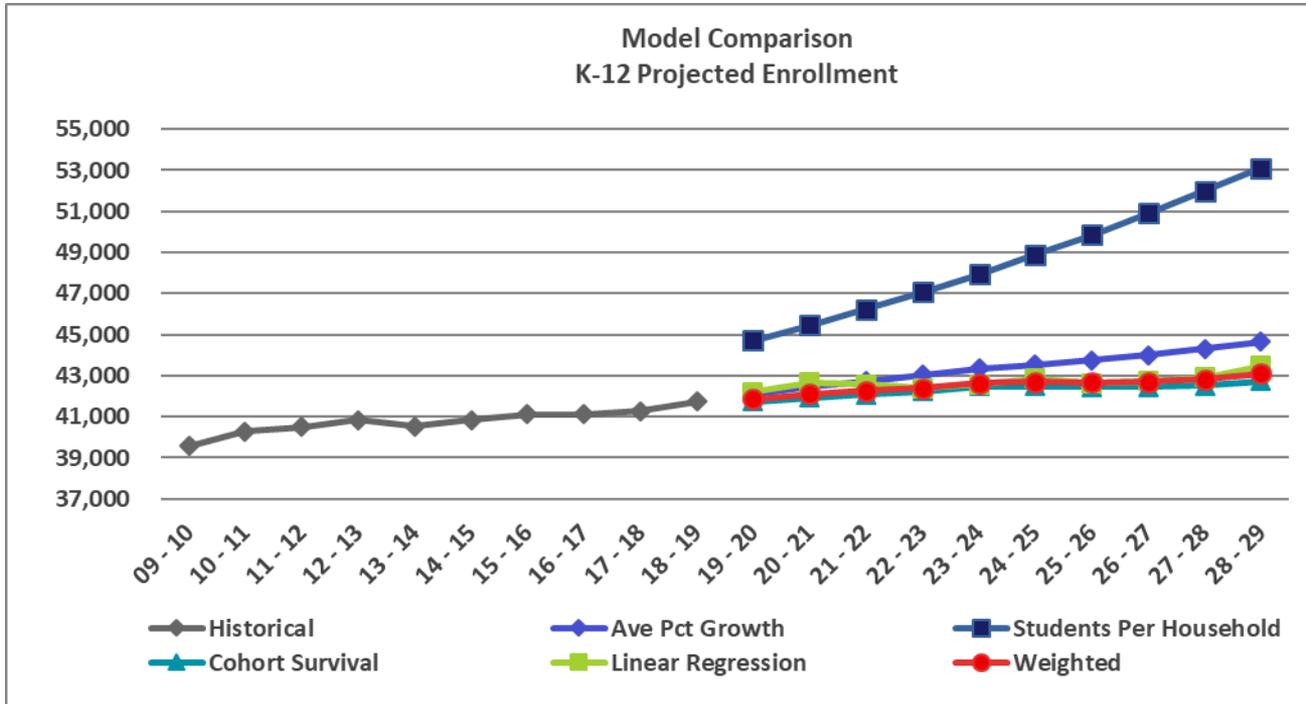
Hamilton County
Historical and Projected
Residential Housing Units by Year



Total housing units increased 12% from 134,692 in 2010 to 151,107 in 2017.

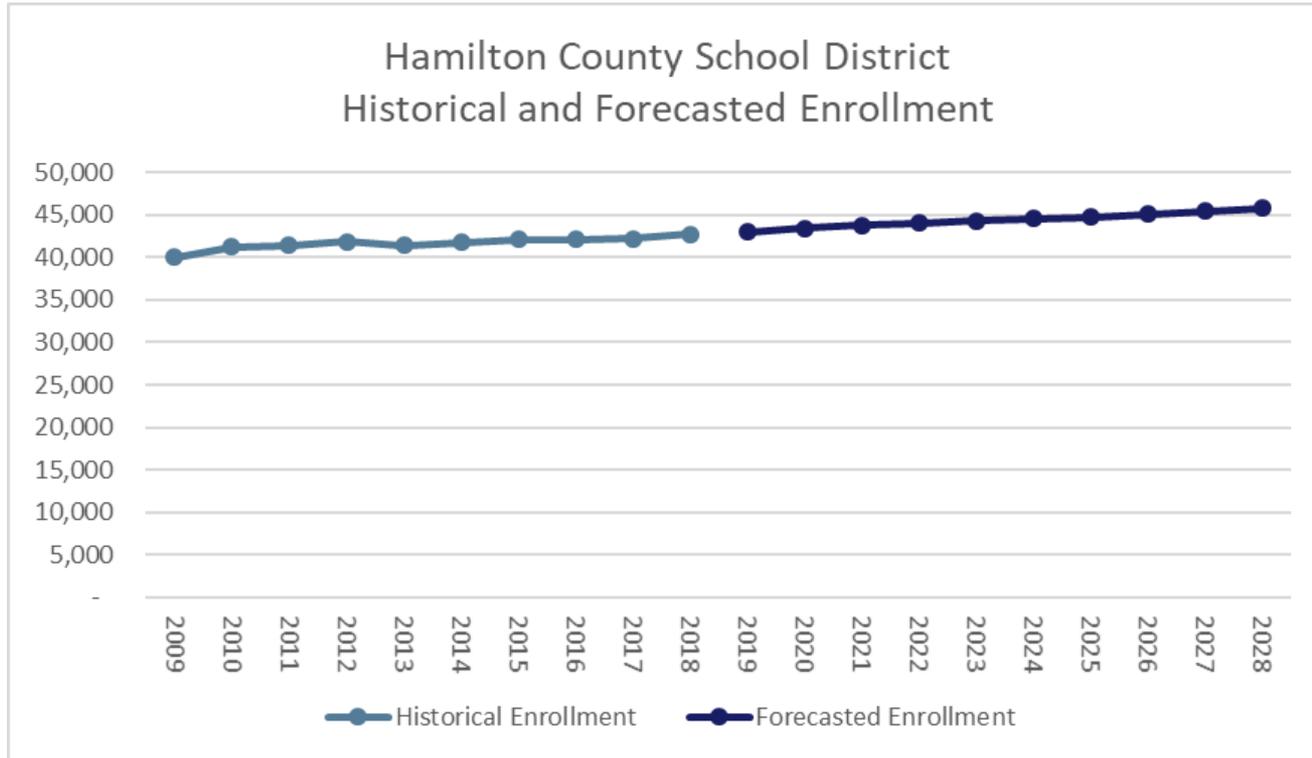
Enrollment Forecast Methodology

– Four Models

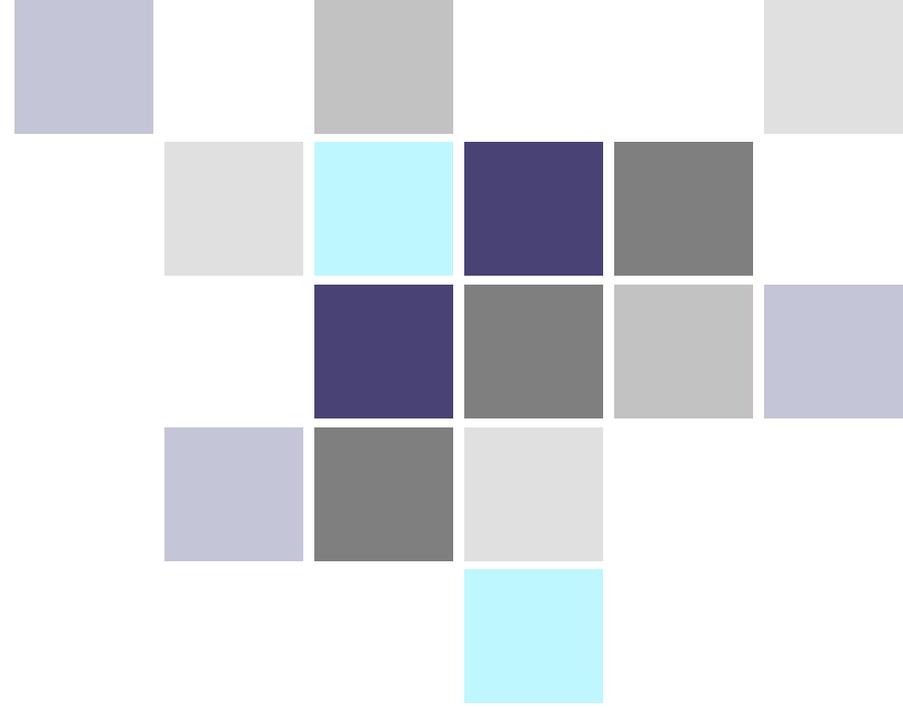


MGT's enrollment forecast is a weighted average of the four models. Weights are selected based on the dynamics of a particular area of the district.

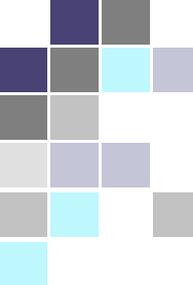
Forecasted Enrollment



Enrollment is forecasted to increase 7.1% from 2018 to 2028.



Capacity and Utilization

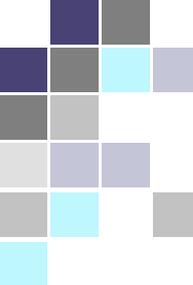


Capacity - Methodology

- Capacity is a decision, not a definition
- Programmatic use of a school determines its instructional capacity, not its square footage
- Program drives the use of individual rooms.
- Grade configuration also drives the use of individual rooms, and, therefore, the programmatic use of the building.
- Square footage is appropriate in other settings, e.g. fire marshal or architectural design, but not when determining how to utilize a building for educational purposes

Capacity – Assumptions

HCDE INSTRUCTIONAL SPACE MODEL GUIDELINES	
ROOM TYPE	LOADING FACTOR (STUDENTS/ROOM)
General classroom grades K-3	20
General classroom grades 4-6	25
General classroom grades 7-12	30
Science (6th)	25
Science (7-12)	30
STEM Lab	20
Vocational (6-12)	20
ROTC	20
Music (6-12)	40
P.E. (6th)	25
P.E. (7-12)	30
Art (6-12)	25
Computer Lab	0
K-5 Exceptional Education (specialized)	10
6-12 Special Education (specialized)	12
K-5 Exceptional Education Resource (pull-out)	0
6-12 Exceptional Education Resource (pull-out)	0
Vacant	25
Portable	25



Capacity – Assumptions

SCHEDULING FACTOR	
Elementary Schools	90%
Middle Schools	80%
High Schools	75%

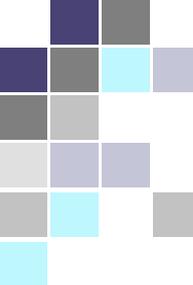
Capacity Calculation Example – Brainerd High School

Next, we multiplied the number of classrooms by the students per classroom loading factor.

Classroom Type	Number of Classrooms	x Students/Classroom	= Capacity
General Classrooms (9-12)	27	30	810
Science	7	30	210
STEM Lab	1	20	20
Vocational	8	20	160
ROTC	5	20	100
Music	2	40	80
Physical Education	1	30	30
Art	1	25	25
Computer Lab	1	0	0
Exceptional Ed (Specialized)	1	12	12
Exceptional Ed (Resource)	1	0	0
Gross Capacity (w/o scheduling factor) = 1,447			
x High School scheduling factor of 75%			
Brainerd High School Capacity = 1,085			

First, we counted the number of the various types of instructional spaces.

Finally, we multiplied the resulting Gross Capacity by the scheduling factor to arrive at the capacity for the school.



Capacity Results

Grade Band	Low	High	Average
Elementary	257	1,089	554
Middle	572	1,117	749
Middle/High	608	1,917	1,224
High	761	1,526	1,099

Utilization Results – 2018-19

Grade Band	Low	High	Average	Total
Elementary	51%	128%	91%	97%
Middle	50%	104%	74%	74%
Middle/High	53%	87%	74%	78%
High	55%	115%	82%	82%

UTILIZATION	DESCRIPTION
> 110	Inadequate Space
95 - 110	Approaching Inadequate Space
80 - 95	Adequate Space
70 - 80	Approaching Inefficient Use of Space
< 70	Inefficient Use of Space

Preliminary Capacity and Utilization - ES

Site Name	MGT K-12 Capacity (Excl Portables)	MGT 2018-19 Utilization	MGT 2019-20 Projected Utilization	MGT 2028-29 Projected Utilization
Allen ES	590	84%	84%	87%
Alpine Crest ES	320	91%	94%	90%
Apison ES	630	87%	91%	95%
Barger ES	347	115%	110%	111%
Battle Academy ES	432	85%	88%	92%
Bess T. Shepherd ES	518	99%	99%	103%
Big Ridge ES	473	105%	106%	107%
Brown Academy ES	455	51%	49%	35%
Calvin Donaldson & Annex (ES)	446	93%	89%	92%
Clifton Hills ES	468	122%	122%	139%
Daisy ES	423	89%	92%	79%
Dupont ES	351	89%	86%	97%
East Brainerd ES	1,089	98%	97%	116%
East Lake ES	513	105%	107%	126%
East Ridge ES	914	105%	102%	116%
East Side ES	639	90%	89%	94%
Hardy ES	603	70%	69%	68%
Hixson ES	473	90%	90%	89%
Lakeside ES	432	91%	91%	74%
Lookout Mountain ES	257	61%	58%	52%
Lookout Valley ES	320	90%	91%	93%
McConnell ES	635	81%	81%	83%
Middle Valley_Ganns ES	869	90%	89%	94%
N. Hamilton County ES	459	81%	84%	87%
Nolan ES	734	89%	95%	103%
Normal Park (Lower)	365	128%	128%	134%
Ooltewah ES	1,017	98%	100%	134%
Orchard Knob ES	576	81%	79%	85%
Red Bank ES	702	79%	78%	77%
Rivermont ES	392	81%	97%	109%
Soddy ES	531	86%	86%	93%
Spring Creek ES	702	89%	88%	95%
Thrasher ES	545	104%	105%	110%
Wallace A. Smith ES	702	90%	95%	84%
Westview ES	522	104%	106%	105%
Wolftever ES	626	93%	91%	110%
Woodmore ES	423	65%	69%	57%

UTILIZATION	DESCRIPTION
> 110	Inadequate Space
95 - 110	Approaching Inadequate Space
80 - 95	Adequate Space
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< 70	Inefficient Use of Space

Preliminary Capacity and Utilization – MS/HS

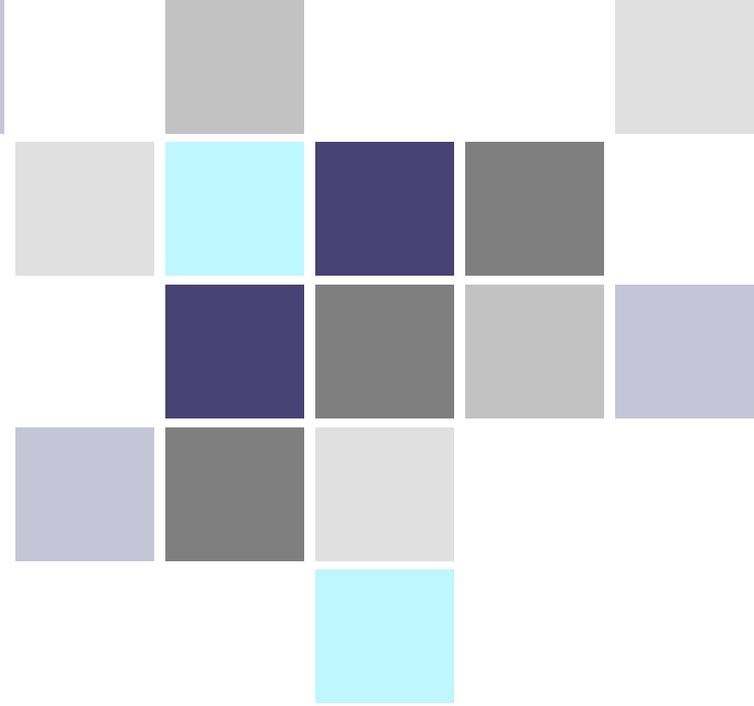
Site Name	MGT K-12 Capacity (Excl Portables)	MGT 2018-19 Utilization	MGT 2019-20 Projected Utilization	MGT 2028-29 Projected Utilization
Brainerd HS	1,085	55%	59%	60%
Brown MS	648	76%	79%	85%
Central HS	839	100%	97%	94%
Dalewood MS	667	52%	51%	53%
East Hamilton MS_HS	1,917	87%	91%	98%
East Lake MS (Academy)	572	104%	104%	123%
East Ridge HS	1,003	81%	80%	84%
East Ridge MS	694	97%	99%	104%
Hixson HS	1,167	76%	75%	87%
Hixson MS	839	78%	78%	87%
Howard HS	854	115%	123%	131%
Hunter MS	1,117	72%	71%	83%
Loftis MS	737	83%	84%	80%
Lookout Valley MS/HS	608	53%	52%	51%
Normal Park (Upper)	652	50%	50%	55%
Ooltewah HS	1,511	101%	102%	123%
Ooltewah MS	951	84%	85%	99%
Orchard Knob MS	678	65%	63%	71%
Red Bank HS	1,147	69%	70%	75%
Red Bank MS	839	69%	69%	71%
Sale Creek MS_HS	671	81%	82%	92%
Signal Mountain MS_HS	1,700	76%	78%	83%
Soddy Daisy HS	1,526	76%	79%	78%
Soddy Daisy MS	654	63%	63%	53%
Tyner Academy (HS)	761	66%	66%	64%
Tyner MS	688	67%	72%	72%

UTILIZATION	DESCRIPTION
> 110	Inadequate Space
95 - 110	Approaching Inadequate Space
80 - 95	Adequate Space
70 - 80	Approaching Inefficient Use of Space
< 70	Inefficient Use of Space

Preliminary Capacity and Utilization – Non-Zoned

Site Name	MGT K-12 Capacity (Excl Portables)	MGT 2018-19 Utilization	MGT 2019-20 Projected Utilization	MGT 2028-29 Projected Utilization
CSAS	1,506	69%	68%	69%
CSLA (K-8)	344	131%	130%	137%
Ctr For Creative Arts_Chatt HS	731	80%	81%	90%
Dawn Program	294	N/A	N/A	N/A
Hamilton Co. HS (Harrison Bay Voc.)	375	26%	N/A	N/A
Sequoyah HS	480	62%	58%	62%
Stem I & II	409	68%	67%	73%
Washington Alternative	188	N/A	N/A	N/A

UTILIZATION	DESCRIPTION
> 110	Inadequate Space
95 - 110	Approaching Inadequate Space
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70 - 80	Approaching Inefficient Use of Space
< 70	Inefficient Use of Space



Facility Assessments

Facility Assessments

- Four Assessments
 - Building Condition
 - Grounds Condition
 - Educational Suitability
 - Technology Readiness
- One Combined Score (50/30/10/10 Weighted Average) for prioritization purposes



Facility Assessment – Educational Suitability and Technology Readiness



Educational Suitability & Technology Readiness Reference Guide

Prepared for Hamilton County Department of Education
Final
March 18, 2019

GENERAL CLASSROOMS

System	Component	Description	What to Look For
General Classrooms	Environment	The rooms should provide an inviting and stimulating environment for learning.	<p>Spatial Configuration (immovable): Does it support the instructional program? Classrooms should have flexible spaces for group learning.</p> <p>Lighting: Appropriate natural light/lighting levels?</p> <p>Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms?</p> <p>HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control?</p> <p>Aesthetics: Are the room finishes/equipment worn and/or dated?</p>
	Size	The rooms should meet the square footage standards. K-1: 850 SF with sinks 2-5: 850 SF 6-12: 750 SF	<p>EXCEL: 90-100% of the room(s) meet standards</p> <p>GOOD: 80-89% of the room(s) meet standards</p> <p>FAIR: 65-79% of the room(s) meet standards</p> <p>POOR: 50-64% of the room(s) meet standards</p> <p>UNSAT: <50% of the room(s) meet standards</p>
	Location	The rooms should be appropriately located for the program.	A room that is appropriately located and shielded from noise-producing activities or functions.
	Storage/Fixed Equip	The rooms should have adequate storage space and fixed equipment appropriate to the program.	<p>Storage: Permanent casework and space for teaching materials and records.</p> <p>Fixed Equipment: One wall of cabinets in K-5 only, counters at age-appropriate height, sinks in K and 1st, a locked wardrobe cabinet. There should be technology equipment appropriate to the program. Visual and audio alarm system in every classroom at Hixson ES/MS/HS.</p>

Examples of general classrooms:



Facility Assessments - Reports

Suitability Report		Score	Possible Score	Score Percentage	
Sequoyah Vocational		68.29	100.00	68.29%	
Project Number	District	Site Number	Site Type		
	Hamilton	196			
Project	Region	Grade Config	Site Size		
HCDE		9-12	57.00		
CATEGORY	RATING	SCORE	POSSIBLE SCORE	SCORE %	COMMENTS
Learning Environment		5.75	8.50	67.65	
Learning Style Variety	Fair	3.25	5.00	65.00	<i>Many of the general classrooms are housed in traditional CTE spaces with roll up doors and limited lighting and not designed for general education spaces. There is limited natural lighting in some areas. General aesthetics are worn and dated.</i>
Interior Environment	Fair	1.30	2.00	65.00	
Exterior Environment	Good	1.20	1.50	80.00	
General Classrooms		6.40	9.86	64.93	
Environment	Fair	1.28	1.97	64.93	<i>Interior classrooms do not have natural light. The HVAC system is inconsistent.</i>
Size	Good	3.94	4.93	79.95	
Location	Good	1.18	1.48	79.82	
Storage/Fixed Equip	no data		1.48		
Agriculture and Natural Resources		4.80	6.00	80.00	
Size	Good	2.40	3.00	80.00	
Storage/Fixed Equip	Good	0.72	0.90	80.00	
Environment	Good	0.96	1.20	80.00	
Location	Good	0.72	0.90	80.00	
Business, Management, and Admin		4.80	6.00	80.00	
Size	Good	2.40	3.00	80.00	
Storage/Fixed Equip	Good	0.72	0.90	80.00	
Environment	Good	0.96	1.20	80.00	
Location	Good	0.72	0.90	80.00	

Facility Assessment Results

Assessment	Estimated Cost	Low	High	Average
Building Condition	\$452 Million	44%	97%	77%
Educational Suitability	\$768 Million	42%	94%	72%
Technology Readiness	\$39 Million	48%	100%	82%
Grounds Condition	\$103 Million	16%	96%	72%

Estimated cost does not include or account for costs associated with adding capacity or costs savings associated with school closure.

Cost estimate does not include additional costs from inflation due to project phasing.

COMBINED SCORES	DESCRIPTION
> 90%	Excellent/Like New
80 - 89	Good
70 - 79	Fair
60 - 69	Poor
< 60	Unsatisfactory

Facility Assessment Results - ES

Site Name	Weighted Building Condition Score	Suitability Score	Technology Score	Grounds Score	Combined Score (50/30/10/10)
Barger ES	48%	61%	73%	46%	54%
Rivermont ES	62%	42%	48%	60%	55%
Normal Park (Lower)	63%	52%	58%	60%	59%
McConnell ES	75%	42%	51%	64%	61%
Lakeside ES	66%	63%	88%	69%	67%
Dupont ES	63%	73%	73%	70%	68%
Woodmore ES	71%	66%	63%	65%	68%
Lookout Mountain ES	77%	58%	65%	62%	68%
Alpine Crest ES	68%	68%	90%	68%	70%
Spring Creek ES	75%	58%	88%	67%	70%
Clifton Hills ES	78%	52%	90%	76%	71%
Lookout Valley ES	82%	60%	55%	90%	73%
Thrasher ES	78%	68%	78%	65%	73%
N. Hamilton County ES	73%	72%	68%	86%	74%
Big Ridge ES	84%	62%	63%	70%	74%
Hixson ES	78%	63%	95%	67%	74%
Bess T. Shepherd ES	78%	68%	85%	76%	75%
Daisy ES	86%	58%	80%	90%	78%
Calvin Donaldson & Annex (ES)	77%	75%	98%	90%	80%
Wallace A. Smith ES	89%	74%	70%	90%	83%
East Side ES	88%	70%	98%	80%	83%
East Lake ES	87%	75%	98%	79%	84%
East Ridge ES	88%	81%	90%	70%	84%
Hardy ES	86%	80%	98%	80%	85%
Soddy ES	91%	71%	98%	88%	85%
Orchard Knob ES	86%	80%	98%	88%	86%
Red Bank ES	85%	82%	98%	88%	86%
Apison ES	88%	81%	98%	79%	86%
Nolan ES	90%	79%	85%	90%	86%
Westview ES	89%	83%	88%	90%	87%
Allen ES	82%	94%	98%	87%	87%
Brown Academy ES	89%	86%	83%	90%	87%
East Brainerd ES	87%	83%	100%	89%	88%
Wolftever ES	90%	85%	98%	85%	89%
Ooltewah ES	88%	91%	100%	80%	89%
Battle Academy ES	90%	93%	93%	80%	90%
Middle Valley_Ganns ES	97%	86%	95%	96%	93%

COMBINED SCORES	DESCRIPTION
> 90%	Excellent/Like New
80 - 89	Good
70 - 79	Fair
60 - 69	Poor
< 60	Unsatisfactory

Facility Assessment Results – MS/HS

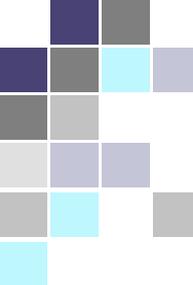
Site Name	Weighted Building Condition Score	Suitability Score	Technology Score	Grounds Score	Combined Score (50/30/10/10)
Tyner MS	47%	69%	83%	39%	56%
Tyner Academy (HS)	57%	70%	75%	16%	58%
East Ridge HS	59%	76%	88%	34%	64%
Normal Park (Upper)	68%	57%	67%	64%	64%
Hixson HS	72%	61%	56%	56%	66%
Soddy Daisy MS	66%	67%	54%	74%	66%
Orchard Knob MS	57%	76%	90%	57%	66%
East Ridge MS	71%	64%	65%	57%	67%
Brainerd HS	63%	74%	100%	40%	68%
Ooltewah HS	79%	67%	63%	66%	72%
Central HS	74%	70%	88%	61%	73%
Brown MS	75%	72%	68%	90%	75%
Ooltewah MS	74%	73%	95%	66%	75%
Red Bank HS	72%	82%	85%	76%	76%
Soddy Daisy HS	75%	76%	90%	70%	77%
Dalewood MS	69%	79%	98%	85%	77%
Lookout Valley MS/HS	80%	71%	75%	90%	78%
Loftis MS	82%	84%	58%	69%	79%
Howard HS	84%	73%	74%	90%	80%
Sale Creek MS_HS	88%	68%	73%	90%	81%
East Lake MS (Academy)	83%	77%	95%	77%	82%
Hunter MS	84%	82%	83%	72%	82%
East Hamilton MS_HS	88%	85%	100%	74%	87%
Signal Mountain MS_HS	89%	93%	90%	90%	90%
Red Bank MS	89%	94%	88%	90%	91%
Hixson MS	89%	94%	100%	89%	92%

COMBINED SCORES	DESCRIPTION
> 90%	Excellent/Like New
80 - 89	Good
70 - 79	Fair
60 - 69	Poor
< 60	Unsatisfactory

Facility Assessment Results – Non-Zoned Schools

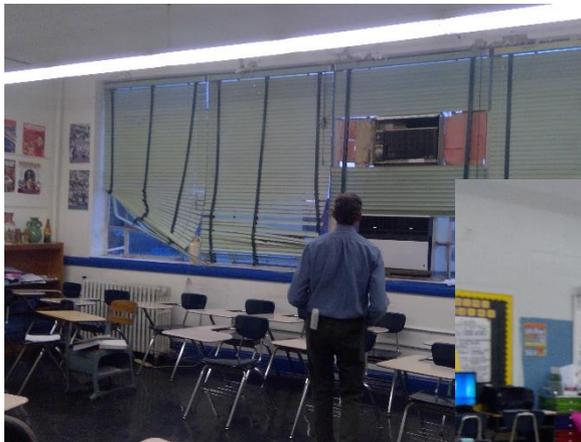
Site Name	Weighted Building Condition Score	Suitability Score	Technology Score	Grounds Score	Combined Score (50/30/10/10)
CSLA (K-8)	44%	63%	78%	49%	54%
CSAS	56%	64%	70%	60%	60%
Dawn Program	60%	60%	85%	43%	61%
Ctr For Creative Arts_Chatt HS	63%	72%	65%	30%	63%
Hamilton Co. HS (Harrison Bay Voc.)	63%	72%	83%	80%	70%
Washington Alternative	83%	59%	90%	73%	75%
Sequoyah HS	83%	77%	83%	80%	81%
Stem I & II	90%	66%	98%	80%	83%

COMBINED SCORES	DESCRIPTION
> 90%	Excellent/Like New
80 - 89	Good
70 - 79	Fair
60 - 69	Poor
< 60	Unsatisfactory

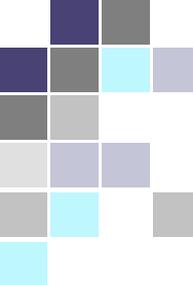


Facility Assessments – Special Considerations

- Hillcrest ES was not assessed due to current plan to close building.
- Harrison ES was not assessed because new building is under construction.
- Snow Hill ES will be assessed in the Fall (2019) after the new addition and renovations are complete.
- Assessments did not address PK spaces.
- Portables were inventoried but were excluded from assessment scores.



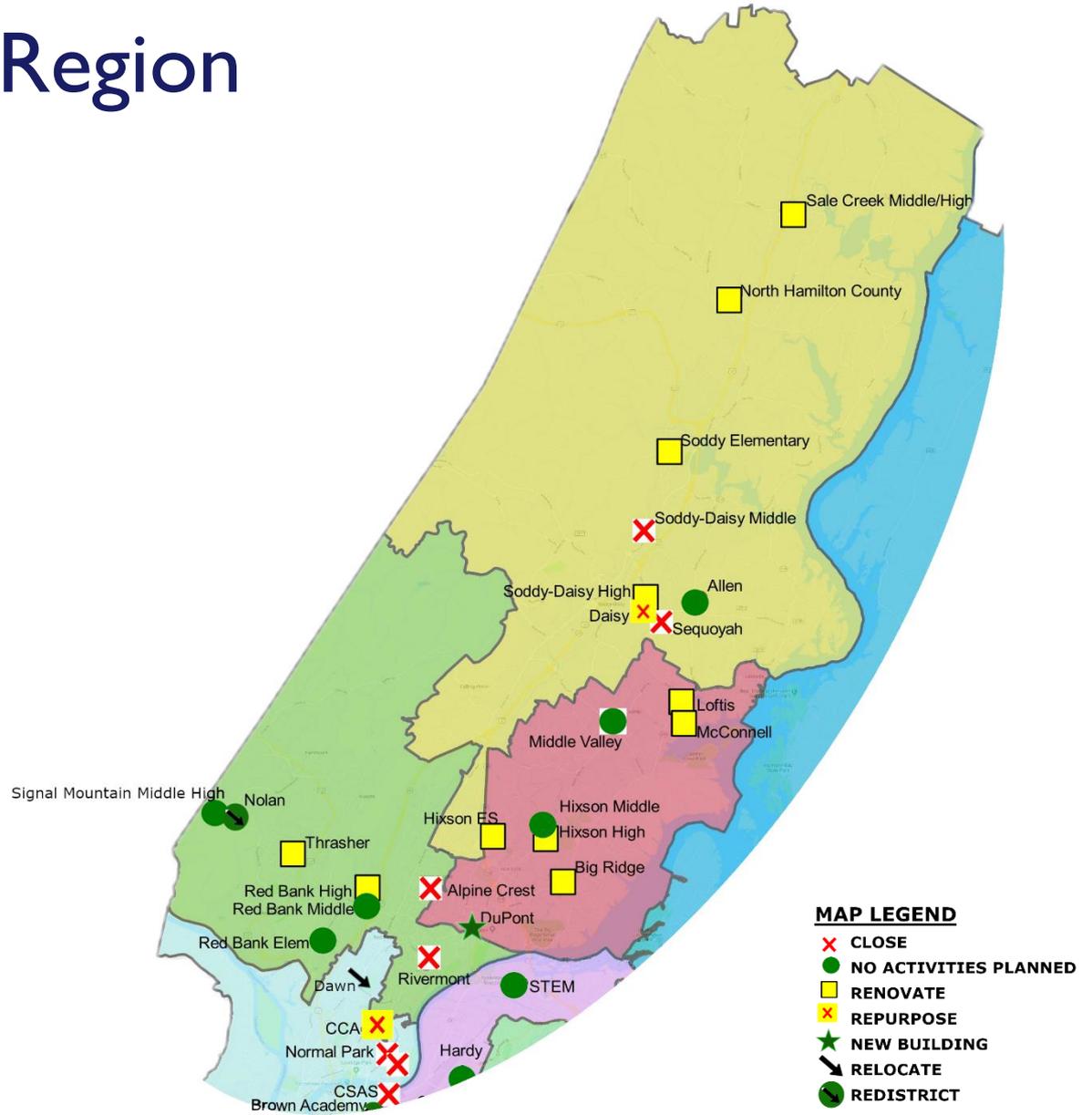
Preliminary Facilities Master Plan



Summary - Facilities Master Plan Objectives

- **Reduce** the overall cost to address deficiencies
- Identify opportunities to gain efficiencies by **reducing** the number of schools and **increasing** the size of remaining schools
- **Optimize** available school capacity to efficiently accommodate forecasted 7.1% growth in enrollment and anticipated shifts in population

Western Region



Western Region - Matrix



Site Name	Size (Acres)	Weighted Building Condition Score	Suitability Score	Technology Score	Grounds Score	Combined Score (50/30/10/10)	2018-19 K-12 Enroll	2028 K-12 Projected Enroll	MGT K-12 Capacity (Excl Portables)	MGT 2018-19 Utilization	MGT 2028-29 Projected Utilization
Sequoyah HS	57	83%	77%	83%	80%	81%	299	297	480	62%	62%
Allen ES	15	82%	94%	98%	87%	87%	494	514	590	84%	87%
Daisy ES	See Soddy D	86%	58%	80%	90%	78%	377	334	423	89%	79%
Loftis MS	See McConn	82%	84%	58%	69%	79%	614	588	737	83%	80%
McConnell ES	50	75%	42%	51%	64%	61%	514	524	635	81%	83%
Middle Valley_Ganns ES	17	97%	86%	95%	96%	93%	784	818	869	90%	94%
N. Hamilton County ES	130	73%	72%	68%	86%	74%	374	400	459	81%	87%
Sale Creek MS_HS	12	88%	68%	73%	90%	81%	542	618	671	81%	92%
Soddy Daisy HS	65	75%	76%	90%	70%	77%	1,156	1,192	1,526	76%	78%
Soddy Daisy MS	35	66%	67%	54%	74%	66%	412	348	654	63%	53%
Soddy ES	9	91%	71%	98%	88%	85%	459	495	531	86%	93%
Dupont ES	13	63%	73%	73%	70%	68%	313	342	351	89%	97%
Hixson ES	17	78%	63%	95%	67%	74%	425	419	473	90%	89%
Big Ridge ES	22	84%	62%	63%	70%	74%	496	504	473	105%	107%
Hixson HS	43	72%	61%	56%	56%	66%	887	1,018	1,167	76%	87%
Hixson MS	26	89%	94%	100%	89%	92%	653	732	839	78%	87%
Alpine Crest ES	17	68%	68%	90%	68%	70%	290	287	320	91%	90%
Nolan ES	259	90%	79%	85%	90%	86%	650	752	734	89%	103%
Red Bank ES	25	85%	82%	98%	88%	86%	558	539	702	79%	77%
Red Bank HS	37	72%	82%	85%	76%	76%	793	864	1,147	69%	75%
Red Bank MS	15	89%	94%	88%	90%	91%	579	600	839	69%	71%
Rivermont ES	10	62%	42%	48%	60%	55%	317	427	392	81%	109%
Signal Mountain MS_HS	See Nolan El	89%	93%	90%	90%	90%	1,294	1,412	1,700	76%	83%
Thrasher ES	17	78%	68%	78%	65%	73%	564	601	545	104%	110%

Western Region – Planning Notes



Western Region Planning Notes

Sale Creek Middle/High School	Renovate original building part of building to correct deficiencies
North Hamilton County ES	Renovate
Soddy Daisy HS	Renovate
Soddy Daisy MS	Close building and move students to Daisy ES, which becomes Soddy Daisy MS
Daisy ES	Add capacity for 377 students and reconfigure building to make it Soddy Daisy MS
Soddy ES	Rename Soddy Daisy ES
Allen ES	No activities planned
Sequoyah HS	Close building. Relocate CTE programs to new CTE Center at current Barger ES site
Middle Valley ES	No activities planned
McConnell ES	Renovate
Loftis MS	Address grounds deficiencies
Hixson ES	Renovate
Hixson MS	No activities planned
Hixson HS	Renovate

Western Region – Planning Notes



Western Region Planning Notes

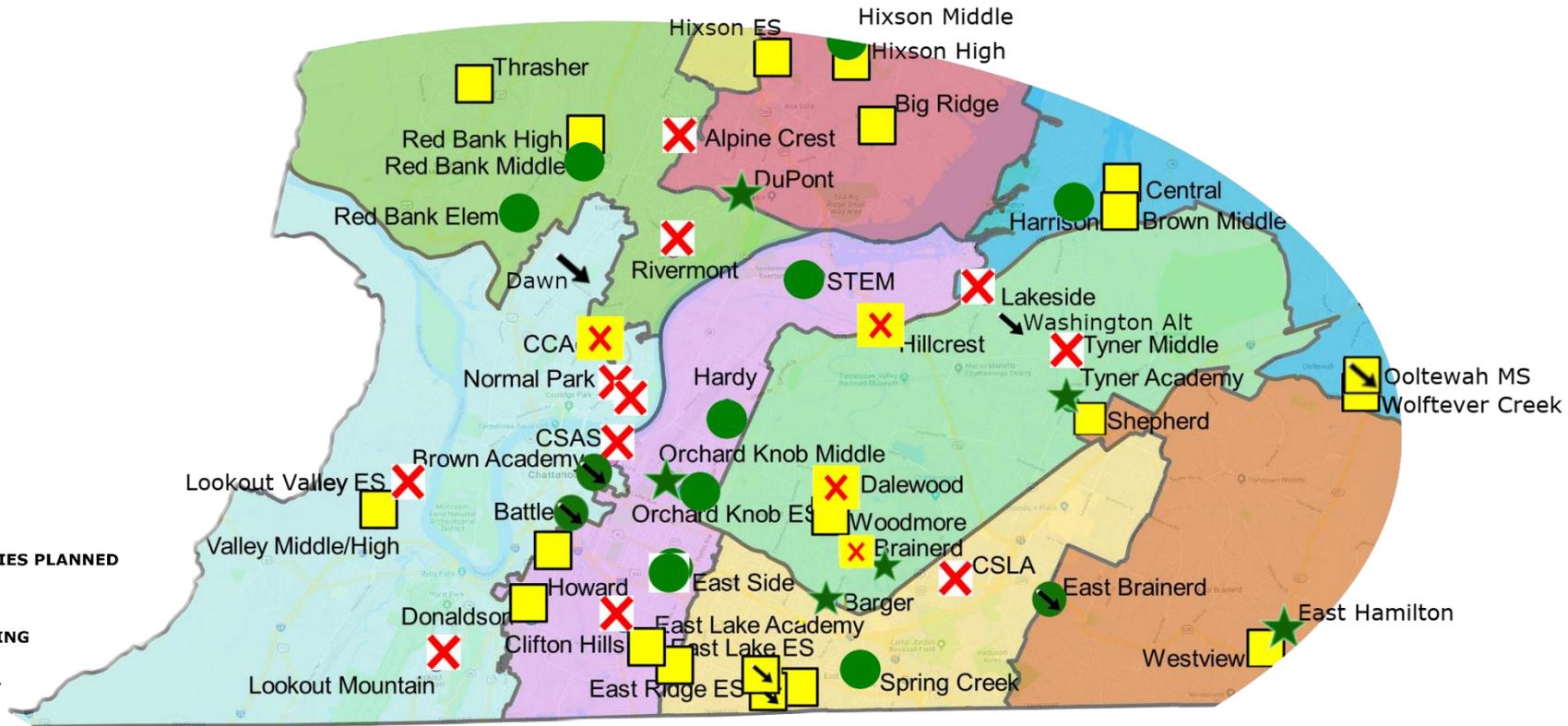
Big Ridge ES	Renovate and add capacity for another 150 students
Dupont ES	Tear down and build new 1,200 student K-5 ES on site
Alpine Crest ES	Close and move students to Dupont ES
Rivermont ES	Close and move students to Dupont ES
Nolan ES	Redistrict 200 students to Thrasher ES.
Thrasher ES	Renovate and add capacity for 400 students
Signal Mountain MS/HS	No activities planned. Anticipated growth in area may require additional capacity in future
Red Bank ES	No activities planned
Red Bank MS	No activities planned. Excess capacity left in place to accommodate growth in west
Red Bank HS	Renovate. Excess capacity left in place to accommodate growth in west

Southern Region



MAP LEGEND

- ✗ CLOSE
- NO ACTIVITIES PLANNED
- RENOVATE
- REPURPOSE
- ★ NEW BUILDING
- ↘ RELOCATE
- REDISTRIBUTE



Southern Region - Matrix



Site Name	Size (Acres)	Weighted Building Condition Score	Suitability Score	Technology Score	Grounds Score	Combined Score (50/30/10/10)	2018-19 K-12 Enroll	2028 K-12 Projected Enroll	MGT K-12 Capacity (Excl Portables)	MGT 2018-19 Utilization	MGT 2028-29 Projected Utilization
Bess T. Shepherd ES	11	78%	68%	85%	76%	75%	514	534	518	99%	103%
Hillcrest ES	1	N/A	N/A	N/A	N/A	N/A	290	299	N/A	N/A	N/A
Harrison ES	1	N/A	N/A	N/A	N/A	N/A	413	458	N/A	N/A	N/A
Lakeside ES	1	66%	63%	88%	69%	67%	393	321	432	91%	74%
CSLA (K-8)	36	44%	63%	78%	49%	54%	452	473	344	131%	137%
Stem I & II	-	90%	66%	98%	80%	83%	277	298	409	68%	73%
East Side ES	10	88%	70%	98%	80%	83%	575	602	639	90%	94%
Tyner Academy (HS)	22	57%	70%	75%	16%	58%	506	489	761	66%	64%
Tyner MS	10	47%	69%	83%	39%	56%	464	494	688	67%	72%
Woodmore ES	10	71%	66%	63%	65%	68%	274	243	423	65%	57%
East Ridge ES	11	88%	81%	90%	70%	84%	959	1,061	914	105%	116%
East Ridge HS	33	59%	76%	88%	34%	64%	815	842	1,003	81%	84%
East Ridge MS	See East Rid	71%	64%	65%	57%	67%	672	722	694	97%	104%
Spring Creek ES	16	75%	58%	88%	67%	70%	627	666	702	89%	95%
Dalewood MS	21	69%	79%	98%	85%	77%	344	357	667	52%	53%
Hardy ES	1	86%	80%	98%	80%	85%	425	410	603	70%	68%
Calvin Donaldson & Annex (ES)	9	77%	75%	98%	90%	80%	414	409	446	93%	92%
Clifton Hills ES	13	78%	52%	90%	76%	71%	570	651	468	122%	139%
East Lake ES	4	87%	75%	98%	79%	84%	540	647	513	105%	126%
East Lake MS (Academy)	5	83%	77%	95%	77%	82%	597	705	572	104%	123%
Howard HS	40	84%	73%	74%	90%	80%	986	1,115	854	115%	131%
Orchard Knob ES	7	86%	80%	98%	88%	86%	468	491	576	81%	85%
Orchard Knob MS	16	57%	76%	90%	57%	66%	441	481	678	65%	71%
Barger ES	9	48%	61%	73%	46%	54%	398	386	347	115%	111%
Brainerd HS	53	63%	74%	100%	40%	68%	601	654	1,085	55%	60%
CSAS	13	56%	64%	70%	60%	60%	1,034	1,044	1,506	69%	69%
Ctr For Creative Arts_Chatt HS	34	63%	72%	65%	30%	63%	583	655	731	80%	90%
Normal Park (Lower)	3	63%	52%	58%	60%	59%	465	489	365	128%	134%
Normal Park (Upper)	8	68%	57%	67%	64%	64%	325	358	652	50%	55%
Battle Academy ES	3	90%	93%	93%	80%	90%	368	396	432	85%	92%
Brown Academy ES	3	89%	86%	83%	90%	87%	231	160	455	51%	35%
Lookout Mountain ES	4	77%	58%	65%	62%	68%	157	134	257	61%	52%
Lookout Valley ES	15	82%	60%	55%	90%	73%	288	297	320	90%	93%
Lookout Valley MS/HS	33	80%	71%	75%	90%	78%	325	312	608	53%	51%
Dawn Program	10	60%	60%	85%	43%	61%	N/A	N/A	294	N/A	N/A
Washington Alternative	18	83%	59%	90%	73%	75%	N/A	N/A	188	N/A	N/A

Southern Region – Planning Notes



Southern Region Planning Notes

Orchard Knob MS	Tear down and build new 1,000 student MS onsite
Dalewood MS	Renovate and repurpose of new location for CCA program. Add capacity to allow for expansion of CCA program to serve 800 students. Move students to new Orchard Knob MS.
Center for Creative Arts	Move CCA program to current Dalewood MS. Renovate building and add capacity to accommodate 1,400 student K-12 expanded Normal Park magnet program.
Normal Park (Lower)	Close buildings and move students to renovated/expanded CCA building. Consolidate programs into 1,400 student K-12 magnet building.
Normal Park (Upper)	
Tyner HS	Tear down and build new 2,000 student 6-12 building onsite with additional adjacent property.
Tyner MS	Close. Tear down building.
Brainerd HS	Renovate and repurpose building as new location for CSAS and CSLA. Move students to Tyner MS/HS, Howard MS/HS, and East Ridge HS.
CSLA	Move program to new 1,200 K-5 building on current Brainerd HS site. Tear down existing building and keep site for possible future school site.
CSAS	Move program to current Brainerd HS and expand program to 1,600 students, grades 6-12. Sell existing CSAS site.

Southern Region – Planning Notes



Southern Region Planning Notes

Lookout Valley MS/HS	Renovate and add capacity for 292 students to create a 900 student K-12 building.
Lookout Valley ES	Close. Move students to Lookout Valley K-12 building.
Lookout Mountain ES	Close. Move students to Lookout Valley K-12 building.
Harrison ES	New school under construction per current district plan. New capacity will be 800. Add capacity for another 200 students.
Lakeside ES	Close. Move 200 students to Harrison ES.
Hillcrest ES	Move 199 students to Harrison ES and 199 students to Hardy ES. Consider renovating building and repurposing as new location for Dawn Program and Washington Alternative.
Hardy ES	Move 200 students to Brown Academy ES and Battle Academy ES.
Battle Academy ES	Turn into a K-2 building to accommodate program demand and Hardy ES students.
Brown Academy ES	Turn into a 3-5 building to accommodate program demand and Hardy ES students.

Southern Region – Planning Notes



Southern Region Planning Notes

Barger ES	Move students to Woodmore ES and Bess T. Shepard ES. Tear down building and build new CTE center on site to accommodate Sequoyah HS and Hamilton County HS programs.
Woodmore ES	Renovate and add capacity for another 400 students to accommodate students from Barger ES and East Ridge ES
Bess T. Shepard ES	Renovate and add capacity for 300 students.
Spring Creek ES	Renovate. Add capacity for another 300 students to accommodate East Ridge students.
East Ridge ES	Move 250 students to Spring Creek ES and 100 students to Woodmore ES.
East Side ES	No activities planned.
East Ridge MS	Renovate. Redistrict to move 100 students to East Hamilton MS.
East Ridge HS	Renovate.

Southern Region – Planning Notes



Southern Region Planning Notes

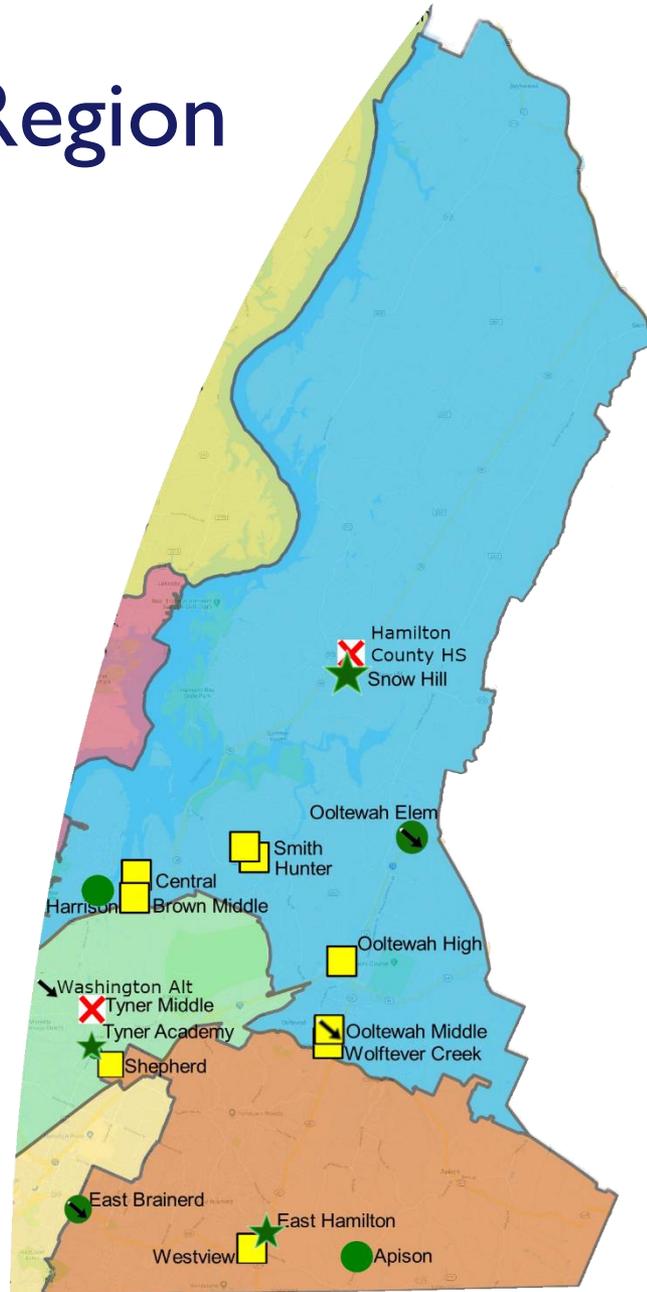
New ES	Build new 1,000 student K-5 in area. Consider old East Lake Academy site or W 40 th St site.
East Lake ES	Move 200 students to New ES.
East Lake MS	Move 200 students to Orchard Knob MS.
Howard HS	Per current district plan, new Howard Connect wing will provide capacity for an additional 450 6-8 students, making building a 6-12 school. No other activities planned.
STEM	No activities planned.
Calvin Donaldson ES	Renovate and add capacity for 100 students.
Clifton Hills ES	Close. Tear down building.
Orchard Knob ES	No activities planned.
Dawn Program	Relocate program. Consider relocating to Hillcrest ES building.
Washington Alternative	Relocate program. Consider relocating to Hillcrest ES building. Current Washington Alternative could become new location for a professional learning center.

Eastern Region



MAP LEGEND

-  CLOSE
-  NO ACTIVITIES PLANNED
-  RENOVATE
-  REPURPOSE
-  NEW BUILDING
-  RELOCATE
-  REDISTRRICT



Eastern Region - Matrix



Site Name	Size (Acres)	Weighted Building Condition Score	Suitability Score	Technology Score	Grounds Score	Combined Score (50/30/10/10)	2018-19 K-12 Enroll	2028 K-12 Projected Enroll	MGT K-12 Capacity (Excl Portables)	MGT 2018-19 Utilization	MGT 2028-29 Projected Utilization
Brown MS	See Central I	75%	72%	68%	90%	75%	494	548	648	76%	85%
Central HS	51	74%	70%	88%	61%	73%	838	791	839	100%	94%
Hunter MS	49	84%	82%	83%	72%	82%	803	922	1,117	72%	83%
Ooltewah ES	31	88%	91%	100%	80%	89%	995	1,367	1,017	98%	134%
Ooltewah HS	45	79%	67%	63%	66%	72%	1,525	1,860	1,511	101%	123%
Ooltewah MS	47	74%	73%	95%	66%	75%	796	941	951	84%	99%
Snow Hill ES	See Hamitlo	82%	TBD	TBD	60%	TBD	502	511	N/A	N/A	N/A
Wallace A. Smith ES	31	89%	74%	70%	90%	83%	631	589	702	90%	84%
Apison ES	42	88%	81%	98%	79%	86%	546	597	630	87%	95%
East Brainerd ES	21	87%	83%	100%	89%	88%	1,070	1,267	1,089	98%	116%
East Hamilton MS_HS	80	88%	85%	100%	74%	87%	1,666	1,875	1,917	87%	98%
Westview ES	15	89%	83%	88%	90%	87%	545	550	522	104%	105%
Wolftever ES	See Ooltewa	90%	85%	98%	85%	89%	579	689	626	93%	110%
Hamilton Co. HS (Harrison Bay Voc.)	62	63%	72%	83%	80%	70%	99	N/A	375	26%	N/A

Eastern Region – Planning Notes



Eastern Region Planning Notes

Hamilton County HS	Close building. Move program to new CTE Center at existing Barger ES site.
Snow Hill ES	Complete renovation and addition per current district plan. New capacity assumed to be 800. Will accommodate 200 students from Ooltewah ES
Ooltewah ES	Move 200 students to Snow Hill ES (current district plan) and 250 students to Wallace A. Smith ES.
Wallace A. Smith ES	Renovate to address Suitability deficiencies and add capacity for 300 students.
Hunter MS	Address Grounds deficiencies.
Brown MS	Renovate.
Central HS	Renovate.
Ooltewah MS	Renovate. Move 100 students to new East Hamilton MS.
East Hamilton MS	Complete construction per current district plan.
Ooltewah HS	Renovate. Move 600 students to East Hamilton HS following completion of new East Hamilton MS.
East Hamilton HS	Repurpose as East Hamilton HS following completion of East Hamilton MS in 2020. Add 600 students from Ooltewah HS

Eastern Region – Planning Notes



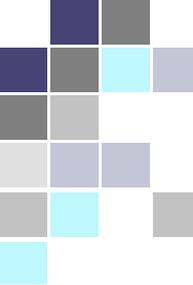
Eastern Region Planning Notes

Apison ES	No activities planned.
Wolftever ES	Add capacity for 300 students to accommodate East Brainerd ES students.
Westview ES	Add capacity for 300 students to accommodate East Brainerd ES students.
East Brainerd ES	Move 150 students to Westview ES and 100 students to Wolftever ES.
*New ES	Will likely need a new elementary school in southern part of this region if growth occurs as anticipated.
**New ES/MS/HS	Will need additional capacity in northern part of this region if growth occurs as anticipated.

Summary – Preliminary Facilities Master Plan

	Preliminary Facilities Master Plan Impacts		
Renovated Schools	11 – Targeting schools with assessment scores between 60-80		
Renovated Schools Receiving Additions	10 – Targeting schools with assessment scores between 60-80		
Replaced (Tear Down and Rebuild)	3 – Targeting schools with assessment scores under 60		
New Buildings	3 – Provide capacity for enrollment growth and relocated programs		
Repurposed Schools	9 – Optimize available capacity and program needs		
Relocated Programs	7 – Optimize available capacity and program needs		
Closed Schools	15 – Poor condition or location, small size, opportunities for consolidation		
Efficiencies Gained =>	Current		Preliminary Master Plan
Estimated Total Cost (2019\$, no phasing)	\$1.36 Billion		Reduced → \$855 Million**
Number of Schools	74		Reduced → 63
Average School Size (Capacity)	695		Increased → 856
	2018-19	2028-29	2028-29
Elementary School Grade Band Utilization	97%	103%	87%
Middle School Grade Band Utilization	74%	80%	84%
Middle/High School Grade Band Utilization	78%	80%	85%
High School Grade Band Utilization	82%	86%	85%

**Does not include revenue generation from sale of real estate or reduced operational expenses.



Summary – Preliminary Facilities Master Plan

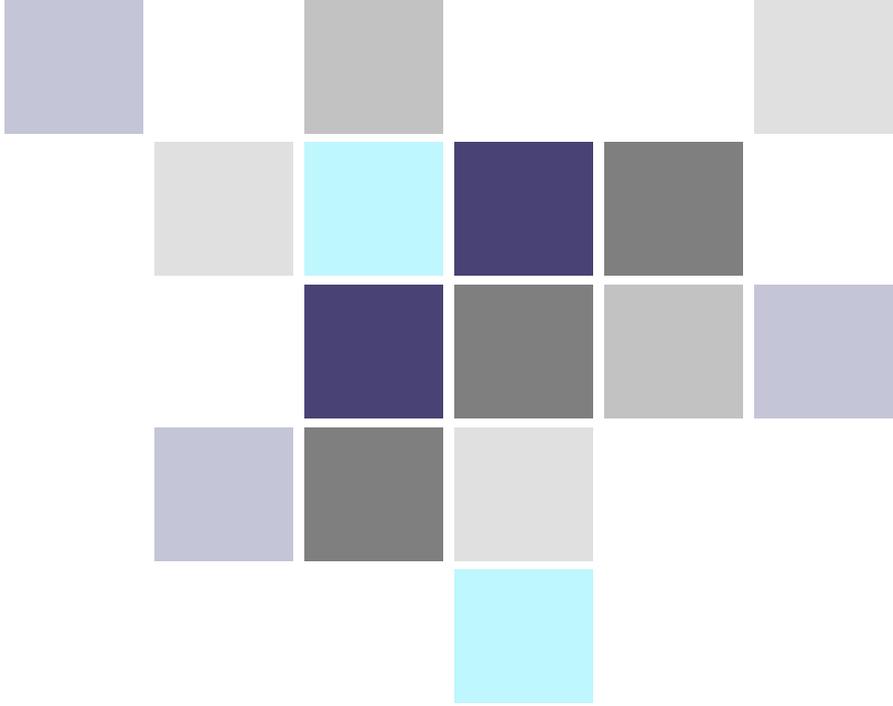
PRELIMINARY FACILITIES MASTER PLAN SUMMARY

Renovated Schools	11 - Sale Creek MS/HS, North Hamilton County ES, Loftis MS, Hixon HS, Hixson ES, Red Bank HS, East Ridge ES, Central HS, Brown MS, Ooltewah MS, Ooltewah HS
Renovated Schools Receiving Additions	10 - Big Ridge ES, Thrasher ES, Calvin Donaldson ES, East Ridge MS, East Ridge HS, Wallace A. Smith ES, Woodmore ES, Harrison ES, Lookout Mountain MS/HS, Soddy ES
Replaced Schools (Tear Down and Rebuild)	3 – Orchard Knob MS, Tyner HS, Dupont ES
New Buildings	3 - East Hamilton MS, CSLA @ Brainerd, New ES
Repurposed Schools	9 - Brainerd HS, Barger ES, CCA, Dalewood MS, Hillcrest ES, Battle Academy ES, Brown Academy ES, Daisy ES, Washington Alternative
Relocated Programs	7 - CSAS, CSLA, CCA, Washington Alternative, Dawn Program, Sequoyah Vocational HS, Harrison Bay Vocational HS
Closed Schools	15 - Alpine Crest ES, Lookout Mountain ES, Lookout Valley ES, Lakeside ES, Normal Park (Lower), Normal Park (Upper), Soddy Daisy MS, Tyner MS, Rivermont ES, Sequoyah Vocational HS, Harrison Bay Vocational HS, CSLA, CSAS, Barger ES, Clifton Hills ES

Next Steps

- August - Gather input from stakeholders
- September/October - Conduct community forums
- November/December - Refine plan and present recommendation





Thank you